Bruhat Bengaluru Mahanagara Palike

Electrical Division

REQUEST FOR PROPOSAL

For Appointment of Independent Engineering Agency for Implementation of Energy Efficiency Project for Streetlights by replacement of Existing Conventional Lamps with LED Lamps along with Centralized Control & Monitoring System (CCMS) in Dasarahalli and Rajarajeshwari Nagar Zone, BBMP, Karnataka.

RFP. NO. EE/ELE/RRN/TEND/01/2024-25

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SECTION I. LETTER OF INVITATION/REQUEST FOR PROPOSALS

No: EE/ELE/RRN/TEND/05/2024-25 DATE: 06/12/2024

1. BBMP invites Proposals to provide the Consultancy Services for Independent Engineering Agency for CONTRACTS through KPP-Portal towards Implementation of Energy Efficiency Project for streetlights by replacement of existing conventional lamps with LED lamps along with Centralized Control & Monitoring System (CCMS) in Dasarahalli and Rajarajeshwari Nagar Zones of BBMP in Karnataka. The expected consultancy services are as below, but not limited to;

Implementation Phase (8 months):

- Understanding the Concessionaire's Equipment Installation and manpower deployment Plan as per their Bid submitted and accordingly advising Authority on technical aspects of project implementation.
- Ensure that during the Conditions Precedent Period both the parties (Authority & Concessionaire) adhere to the terms and conditions of the RFP & Concession Agreement signed between Concessionaire & Authority. In case of extension/dispute, the Independent
- Engineering Agency shall guide the Authority in the interest of the Project.
- Assisting Authority in validating the Asset Identification and marking, truing up of inventory and accordingly truing up of EMI, in coordination with Concessionaire.
- Validate the pole marked by the Concessionaire and each new Street lighting pole covered under this Project.
- Coordinating with ESCOM and the ULB/s in finalising the pre-requisites of implementation activity.
- Assisting Authority in obtaining necessary approvals from different departments for commencement of implementation.
- Approval of Equipment/LED streetlights Installation Plan.
- Prepare project implementation and monitoring schedule for implementation and O&M phase based on the life cycle of the fixtures, CCMS components and other requisite activities and submit to Authority to ensure proactive measures rather than reactive measures.
- Independently review and monitor works carried out to ensure quality and performance compliance by the PPP Concessionaire; Undertake regular inspections, site visits and quality audits of works and report the same to Authority;

- Review matters related to statutory requirements, safety and environment management measures adopted by PPP Concessionaire;
- Testing, validation, quality assurance and certification of LED street lights, smart meters and CCMS system, in order to ensure the sustainability and high quality of the proposed smart systems.
- Issue Equipment Commissioning Certificate with respect to the Technical Specifications;
- Scrutinise and submit the works invoiced periodically by the PPP Concessionaire for having satisfactorily executed/ installed & commissioned the system;
- Assist Authority in monitoring performance obligations of Concessionaire and contract monitoring, including levy of penalties, etc.,
- Prepare information material and conduct internal training programmes for capacity building of Authority's staff.

O&M Phase (07 years from Commercial Operations Date (COD)):

- Prepare an annual activity plan and present to Authority concerning financially attractive investments to reduce energy costs.
- Analysis of CCMS data and recommendation for improving the performance of LED streetlights. Prepare and submit periodic energy audit reports on based on the CCMS data and the performance of the proposed LED system. Suggest on the possible areas of energy savings and recommend action plan for the same.
- Establish a methodology on accurate calculation of the specific energy consumption of various products/ services or activity of the firm.
- Validation and certification of actual energy savings and recommendation for periodic payments to Concessionaire.
- Analyse equipment performance with respect to energy efficiency. Ensure proper functioning and calibration of instrumentation required to assess level of energy consumption directly or indirectly.
- Certification of penalty for non-achievement of guaranteed savings / event of default, recommendations during force majeure event, penalty for not meeting the performance indicators, etc.,
- Reconciliation of energy savings with ESCOM bills as per the tariff rates of respective financial year.

- Monitoring of fund utilisations for the project & recommending corrective actions, as required.
- Assist the Authority in estimating savings and coordinating with ESCOM's, for reducing sanctioned load of each of the street light metering point periodically based on the new load after the installation of LED lights.
- Submit monthly/Flash reports to the Authority during the project tenure and participate in all the meetings relevant to the project as per the requirement of the Authority.
- Coordinate with ESCOM, Authority and other relevant stakeholders, wherever necessary, for smooth implementation of the project during the implementation and O&M period.
- Guiding authority in capacity addition of new LED lights.
- Review matters related to regulatory & statutory requirements, safety and environment management measures adopted by PPP Concessionaire.
- Review the compliance of the PPP Concessionaire with the performance obligations under the contract.
- Scrutiny the works invoiced by the PPP Concessionaire for having satisfactorily operated & maintained the system;
- Develop and manage training programme for energy efficiency at operating levels.
- Create knowledge bank on sectorial, national and international development on energy efficiency technology and management system and information denomination.
- Any other obligations that are deemed to be the responsibility of the Independent Engineering Agency as per the terms of the agreement entered between the Authority and LCO.

More details on the Services expected from the selected Consultancy firms are provided in the attached Terms of Reference.

2. This electronic Request for Proposal (RFP) is open to all eligible and reputed Consultancy firms complying with the qualification criteria prescribed in this RFP.

3. Evaluation of Bids shall be done in **Single stage two cover system**. Bidders scoring above minimum qualifying marks (75 marks out of 100) in the technical evaluation stage shall be eligible for financial evaluation stage. Scoring system will be applicable as described in this RFP. A Consultant will be selected under Least Cost Selection (LCS) procedures described in this RFP.

4. The interested Consultancy firms shall furnish the following information in support of the required **pre-qualification** and experience to carry out the said consultancy services:

   a) A Registered company under Companies Act 1956 and/or latest amendment Thereafter. Copy of such Registration Certificate should be submitted along with the Bid document

   b) Minimum annual turnover of **66.97 lakhs** in any two years of the last 5 financial years (i.e. 2019-20 to 2023-24).

   c) Provided services of energy efficiency in street light projects in any of the following capacities: Transaction Advisor/ Quality Consultant / Third Party Inspector/ any similar capacities ***(minimum 1 similar projects*** – each project of consultancy value not less than **33,50,000/-**. The services should be satisfactorily complete or completed 90% of on-going work.

   d) Experience of working with Government/ municipal bodies/ ULBs/ City Corporations in India (minimum 1 similar project).

   Consultancy firms may submit Proposal as a Sole Bidder only. JV/Consortium is not allowed.

5. The RFP includes the following documents:

   Section 1 - Letter of Invitation
   Section 2 - Information to Consultants
   Section 3 - Technical Proposal - Standard Forms
   Section 4 - Financial Proposal - Standard Forms
   Section 5 - Terms of Reference
   Section 6 - Standard Form of Contract.
   Section 7 – Appendix

6. Details on the submission date, time and place are provided in clause 4 of ITC

Yours sincerely,
Sd/-
(Name of authority)

SECTION II. INSTRUCTIONS/INFORMATION TO CONSULTANTS

1. INTRODUCTION

1.1 The Authority will select a Consultancy firm in accordance with the method of selection indicated in the Data Sheet.

1.2 Consultancy firms are invited to submit a Technical Proposal and a Financial Proposal, as specified in the Data Sheet (the Proposal) for services required for the Assignment named in the Data Sheet ***through the KPPP platform only***. The Proposal will be the basis for contract negotiations and ultimately for a signed contract with the selected Consultancy firm/ Independent Agency.

1.3 The Assignment shall be implemented in accordance with the phasing indicated in the Data Sheet. When the Assignment includes several phases, the performance of the Independent Engineering Agency under each phase must be to the Authority's satisfaction before work begins on the next phase.

1.4 The Consultancy firms must familiarize themselves with local conditions and take them into account in preparing their Proposals. To obtain first-hand information on the Assignment and on the local conditions, Consultancy firms are encouraged to pay a visit to the Authority before submitting a Proposal, and to attend a pre-Proposal conference specified in the Data Sheet. Consultancy firms should inform the officials well in time to make appropriate arrangements for the visit. Attending the pre-Proposal conference is optional. Consultancy firms' representative may contact the officials named in the Data Sheet to obtain additional information on the pre-Proposal conference.

1.5 The Authority will provide the inputs specified in the Data Sheet, assist the Consultancy firm in obtaining licenses and permits needed to carry out the services, and make available relevant project data and reports, if needed.

1.6 Please note that (i) the costs of, preparing the Proposal and of negotiating the contract, cost incurred on visit to the Authority are not reimbursable; and (ii) The Authority is not bound to accept any of the Proposals submitted without assigning any reasons.

1.7 The Authority expects Consultancy firms selected as Independent Engineering Agency to provide professional, objective, and impartial advice and at all times hold the Authority's interests paramount, without any consideration for future work, and strictly avoid conflicts with other Assignments or their own corporate interests. Independent Engineering Agency shall not be hired for any assignment that would be in conflict with their prior or current obligations to other Authority's, or that may place them in a position of not being able to carry out the Assignment in the best interest of the Authority.

1.7.1 Without limitation on the generality of this rule, Independent Engineering Agency shall not be hired under the circumstances set forth below:

(a) A firm which has been engaged by the Authority to provide goods or works for a project, and any of their affiliates, shall be disqualified from providing consulting services for the same project. Conversely, firms hired to provide consulting services for the preparation or implementation of a project, and any of their affiliates, shall be disqualified from subsequently providing goods or works or services related to the initial Assignment (other than a continuation of the firm's earlier consulting services) for the same project.

(b) Consultants or any of their affiliates shall not be hired for any Assignment which, by its nature, may be in conflict with another Assignment of the Consultants.

1.7.2 As pointed out in Para. 1.7.1 (a) above, Independent Engineering Agency may be hired for downstream work, when continuity is essential, in which case this possibility shall be indicated in the Data Sheet and the factors used for the selection of the Independent Engineering Agency should take the likelihood of continuation into account. It will be the exclusive decision of the Authority whether or not to have the downstream Assignment carried out, and if it is carried out, which Independent Engineering Agency will be hired for the purpose.

1.8 It is GoK's policy that Consultancy firms observe the highest standard of ethics during the execution of such contracts. In pursuance of this policy, the GoK:

(a) Defines, for the purposes of this provision, the terms set forth below as follows:

(i) ***"corrupt practice"*** means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution; and

(ii) ***"fraudulent practice"*** means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of the GoK, and includes collusive practices among Consultancy firms (prior to or after submission of Proposals) designed to establish prices at artificial, non-competitive levels and to deprive the GoK of the benefits of free and open competition.

(b) will reject a Proposal for award if it determines that the firm recommended for award has engaged in corrupt or fraudulent activities in competing for the contract in question;

(c) will declare a Consultancy firm ineligible, either indefinitely or for a stated period of time, to be awarded GoK-financed/PPP contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a GoK-financed/PPP contract;

(d) Will have the right to inspect Consultancy firm's accounts and records relating to the performance of the contract and to have them audited by auditors appointed by GoK; and

(e) will have the right to require that, GoK to inspect consultant's accounts and records relating to the performance of the contract and to have them audited by auditors appointed by GoK.

1.9 Consultancy firms shall not be under a declaration of ineligibility for corrupt and fraudulent practices issued by GoK in accordance with the above sub para 1.8 (d).

1.10 Consultancy firms shall be aware of the provisions on fraud and corruption stated in the standard contract under the clauses indicated in the Data Sheet.

2. CLARIFICATION AND AMENDMENT OF RFP DOCUMENTS

2.1 Consultancy firms may request a clarification of any item of the RFP document up to number of days indicated in the Data Sheet before the Proposal submission date. Any request for clarification must be sent in writing by paper mail, cable, telex, facsimile, or electronic mail to the Authority's address indicated in the Data Sheet. The Authority will respond by electronic mail to such requests and will send copies of the response (including an explanation of the query but without identifying the source of inquiry) to all invited Consultancy firms who intend to submit Proposals.

2.2 At any time before the submission of Proposals, the Authority may, for any reason, whether at its own initiative or in response to a clarification requested by a firm, modify the RFP documents by amendment by issuing online addendum. The addendum will appear on the web page of the website kppp.karnataka.gov.in. Addenda shall be uploaded in the e-portal only and will be binding on all applicants. Any addendum thus issued shall be part of the RFP documents and deemed to have been communicated to all the prospective Consultancy firms. The Authority may at its discretion extend the deadline for the submission of Proposals.

3. PREPARATION OF PROPOSAL

3.1 Consultancy firms are requested to submit the Proposal written in the language(s) specified in the Data Sheet.

Reports to be issued by the Consultancy firms as part of this Assignment must be in the language(s) specified in the Data Sheet. It is desirable that the firm's personnel have a working knowledge of BBMP official language.

Technical Proposal

3.2 In preparing the Technical Proposal, Consultant is expected to examine the documents comprising this RFP in detail. Material deficiencies in providing the information requested may result in rejection of the Proposal. The details of documents to be provided are listed in the Data Sheet. (Consultants may provide the CV's of individuals with the commitment letter for the contract period to the Authority who are willing to work.)

3.3 While preparing the Technical Proposal, Consultancy firms must give particular attention to the following:

(i) If a Consultancy firm considers that it does not have all the expertise for the Assignment, it may obtain a full range of expertise by associating with individual Consultant(s) invited for this Assignment only with approval of the Authority as indicated in the Data Sheet.

(ii) For assignments on a staff-time basis, the estimated number of key professional staff-months is given in the Data Sheet. The proposal shall, however, be based on the number of key professional staff-months estimated by the firm.

(iii) It is desirable that the majority of the key professional staff proposed to be the permanent employees of the firm or have an extended and stable working relation with it.

(iv) Proposed key professional staff must at a minimum have the experience indicated in the Data Sheet.

(v) Alternative key professional staff shall not be proposed, and only one Curriculum vitae (CV) may be submitted for each position

(vi) Reports to be issued by the consultants as part of this assignment must be in the language (s) specified in the Data Sheet. It is desirable that the firm's personnel have a working knowledge of the Authority's official language (i.e.) kannada.

3.4 The Technical Proposal should provide the following information using the attached Standard Forms (Section 3):

(i) A brief description of the Consultancy firm details and an outline of recent experience on Assignments (Section 3B) of a similar nature. For each Assignment, the outline should indicate, inter alia, the profiles and names of the staff provided, duration of the Assignment, contract amount, and firm's involvement.

(ii) Any comments or suggestions on the Terms of Reference and on the data, a list of services, and facilities to be provided by Authority (Section 3C).

(iii) A description of the methodology and work plan for performing the Assignment (Section 3D).

(iv) The list of the proposed staff team by speciality, the tasks that would be assigned to each staff team member and their timing (Section 3E).

(v) CVs recently signed by the proposed key professional staff and the authorized representative submitting the Proposal (Section 3F). Key information should include number of years working for the firm/entity, and degree of responsibility held in various Assignments during the last ten (10) years. Letter of Consent from the proposed key professional staff only, are to be appended to the bid. However, in respect, of other experts, the Consultancy firm can submit the duly signed CVs at the time of Negotiation.

(vi) Estimates of the total staff effort (professional and support staff; staff time) and tools, equipments and machines to be provided to carry out the Assignment, supported by bar chart diagrams showing the time proposed for each key professional staff team member. (Sections 3E and 3G).

(vii) A detailed description of the proposed methodology, staffing and monitoring of Contracts, training, if the Data Sheet specifies training as a major component of the assignment.

(viii) Any additional information requested in the Data Sheet.

3.5 The Technical Proposal shall not include any financial information. Bid will be treated Technically Non Responsive, if technical proposal includes any financial submission forms.

Financial Proposal

3.6 In preparing the Financial Proposal, Consultants are expected to take into account the requirements and conditions of the RFP documents. The Financial Proposal should follow Standard Forms (Section 4). It lists all costs associated with the Assignment, including (a) remuneration for staff, and (b) reimbursable such as subsistence (per diem, housing), transportation (national and local, for mobilization and demobilization), services and equipment (vehicles, office equipment, furniture, and supplies), office rent, insurance, printing of documents and surveys and training, if it is a major component of the assignment. If appropriate, these costs should be broken down by activity. If financial forms under section 4 are not uploaded in the e-portal, the bid shall stand rejected.

3.7 Consultant shall express the price of their services (Consultancy fee) in ***Indian Rupees in the KPP portal and the same shall be inclusive of all duties, fees, levies and other impositions likely to be levied under the existing, amended or enacted laws during life of this contract except GST.***

However, in RFP Section 4, Form B the same shall be quoted inclusive of applicable taxes except GST. For evaluation purpose the quote excluding applicable taxes will be considered.

3.8 The Data Sheet indicates how long the Proposals must remain valid after the submission date. During this period, the Consultancy firms are expected to keep available the key professional staff proposed for the Assignment. Authority will make its best effort to complete the negotiations within this period. If Authority wishes to extend the validity period of the Proposals, the Consultancy firms who do not agree have the right not to extend the validity of their Proposals which also results in rejection of their Bid.

SUBMISSION, RECEIPT AND OPENING OF PROPOSALS

4.1 The Proposal (Technical Proposal and Financial Proposal; see para 1.2) shall be prepared and uploaded on the KPP portal kppp.karnataka.gov.in. The documents and details mentioned in clause 3 above shall be submitted on

line on website kppp.karnataka.gov.in. Details and process of online submission of the tender and relevant documents are given in the website mentioned above.

4.2 The proposal under this contract is electronic proposal submission through website kppp.karnataka.gov.in. Detailed guidelines for viewing proposals and submission of online proposals are given on the website. The Invitation for Proposals is published on this website. Consultancy firm can log on to this website and view the Invitation for Proposals and can view the details of works for which proposals are invited. The prospective Consultancy firm shall submit proposals online; for this, the

Consultancy firm is required to have enrolment/registration in the website and should have valid Digital Signature Certificate (DSC). The DSC can be obtained from any authorized certifying agencies. The Consultancy firm should register in the website kppp.karnataka.gov.in. After this, the Consultancy firm can login the site through the secured login. The completed Technical and Financial Proposal must be uploaded on or before the time and date stated in the data sheet. Any Proposal received after the closing time of submission, shall be rejected.

Note: The Employer shall not be responsible for any technical issues pertaining to internet connectivity, browser compatibility and any other technical issues pertaining to e-procurement portal.

4.3 Consultancy firms are requested to go through the RFPs carefully and submit the required information without exception, otherwise proposals will be rejected.

4.4 The completed proposal comprising documents indicated in clause 3, should be uploaded on the website given above through e-tendering along with scanned copies of requisite certificates as are mentioned in different sections in the RFP document.

4.5 Proposals must be received by the Authority online not later than time specified in the proposal data sheet. The electronic system would not allow any late submission of proposals after due date and time as per server time.

4.6 After the deadline for submission of Proposals, the Technical Proposal shall be opened on the specified date by the Authority. The Financial Proposal shall remain sealed and deposited with the Authority until all submitted Proposals are opened.

4.7 Proposal submission address is as given in data sheet.

4.8 Last date of submission of the Proposal is as given in data sheet.

5. PROPOSAL EVALUATION

General

5.1 From the time, the Proposals are opened to the time the contract is awarded, if any Consultancy firms wishes to contact Authority on any matter related to its Proposal, it should do so in writing at the address indicated in the Data Sheet. Any effort by the firm to influence Authority in Proposal evaluation, Proposal comparison or contract award decisions, etc. may result in the rejection of the Consultant's Proposal.

5.2 Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation, including its approval by authority is obtained.

Evaluation of Technical Proposals

5.3 The Evaluation Committee appointed by Authority as a whole, and each of its members individually, evaluates the Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria and point system specified in the Data Sheet. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the Terms of Reference or if it fails to achieve the minimum technical score indicated in the Data Sheet.

Public Opening and Evaluation of Financial Proposals; Ranking

5.4 After the technical evaluation is completed, Authority shall notify those Consultancy firms whose Proposals did not meet the minimum qualifying mark or were considered non-responsive to the RFP and Terms of Reference, indicating that their Financial Proposals will be unopened. Authority shall simultaneously notify the Consultancy firms that have secured the minimum qualifying mark, indicating the date and time set for opening the Financial Proposals. The opening date shall not be sooner than one week after the notification date. The notification shall be intimated through the e-procurement portal only.

5.5 The Financial Proposals shall be opened publicly in the presence of the Consultancy firms' representatives who choose to attend. The name of the Consultancy firm, the technical scores and the proposed prices shall be read aloud and recorded when the Financial Proposals are opened. Authority shall prepare minutes of the public opening.

5.6 The Evaluation Committee will determine whether the Financial Proposals are complete, (i.e., whether Consultancy firms have costed all items of the corresponding Technical Proposals, **if not, Authority will cost them** and add their cost to the initial price), correct any computational errors.

5.7 The Client will select the lowest proposal ('evaluated' price) among those that passed the minimum technical score. The selected Consultant will be invited Negotiations.

6. NEGOTIATIONS

6.1 Negotiations will be held at the address indicated in the Data Sheet. The aim is to reach agreement on all points and sign a contract.

6.2 Negotiations will include a discussion of the Technical Proposal, the proposed methodology (work plan), staffing and any suggestions made by the firm to improve the Terms of Reference. Authority and Consultant will then work out final Terms of Reference, staffing, staff-months, bar charts indicating activities, staff, and periods in the field and in the home office, logistics, and reporting. The agreed work plan and final Terms of Reference will then be incorporated in the "Description of Services" and form part of the contract. Special attention will be paid to getting the most the Consultant can offer within the available budget and to clearly defining the inputs required from Authority to ensure satisfactory implementation of the Assignment.

6.3 Unless there are exceptional reasons, the financial negotiations will involve neither the remuneration rates for staff (no breakdown of fees) nor other proposed unit rates.

6.4 Having selected the Consultancy firms on the basis of, among other things, an evaluation of proposed key professional staff, Authority expects to negotiate a contract on the basis of the experts named in the Proposal. Before contract negotiations, Authority will require assurances that the experts will be actually available throughout the assignment period. Authority will not consider substitutions during contract negotiations unless both parties agree that undue delay in the selection process makes such substitution unavoidable or that such changes are critical to meet the objectives of the Assignment. If this is not the case and if it is established that key staff was offered in the Proposal without confirming their availability, the Consultancy firm may be disqualified.

6.5 The negotiations will conclude with a review of the draft form of the contract. To complete negotiations Authority and the Consultancy firm will initial the Contract. If negotiations fail, the Authority will invite the firm who has quoted second lowest price for negotiations. The process will be repeated till an agreed Contract is concluded.

7. AWARD OF CONTRACT

7.1 The contract will be awarded following negotiations. After negotiations are completed, Authority will promptly notify other Consultancy firms on the shortlist that they were unsuccessful and return the Financial Proposals unopened of those Consultancy firms who did not pass the technical evaluation (Para 5.3)

7.2 The selected Consultancy firm is expected to commence the Assignment on the date and at the location specified in the Data Sheet.

8. CONFIDENTIALITY

8.1 Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Consultancy firms who submitted the Proposals or to other persons not officially concerned with the process, until the winning Consultancy firms have been notified that it has been awarded the contract.

9. DATA SHEET

Information to Consultants

Clause Ref	
9.1	The name of the Authority is: **Bruhat Bengaluru Mahanagara Palike** The method of selection is: **Least Cost Selection** (**LCS)**
9.2	Technical and Financial Proposals are requested: **Yes** Name of the Assignment: **Appointment of Independent Engineering Agency for Implementation of Energy Efficiency Project for streetlights by replacement of existing conventional lamps with LED lamps along with Centralized Control & Monitoring System (CCMS) in Dasarahalli and Rajarajeshwari Nagar Zones of BBMP in Bengaluru, Karnataka.**
9.3	The Assignment is phased: Yes 1. Implementation Phase 2. O&M Phase
9.4	A Pre-Proposal conference will be held: Yes **Date**: 16/12/2024 **Time**: 11.30 Hrs. **Venue**: Head office, N R Square Contact person (Name, Contact no, mail id): Pre -proposal Conference Coordinator SHANKARAPPA H Executive Engineer (Ele) Rajarajeshwari Nagar Zone, BBMP E-mail: ee.ele.rrn@gmail.com
9.5	Authority will provide the following inputs: Necessary assistance in co-ordinating with the requisite stakeholder for ensuring availability of data, records, reports etc.
9.6	Authority envisages the need for continuity for downstream work: No
9.7	The clauses on fraud and corruption in the contract are Sub-Clause 2.7.1 of G.C.C.

9.8	Clarifications may be requested up to two days prior to Pre-Proposal conference date. The address for requesting clarifications is: *Executive Engineer (Ele)* *Rajarajeshwari Nagar Zone* *3rd stage, Jawaharlala Nehru Road,* *Rajarajeshwari Nagar, BBMP* *E-mail Id: ee.ele.rrn@gmail.com*		
9.9	Proposals should be submitted in the following language : English		
10	The interested consultancy firms shall furnish information in support of the required **pre- qualification** and experience to carry out the said services. a) A Registered company under Companies Act 1956 and/or latest amendment Thereafter. Copy of such Registration Certificate should be submitted along with the Bid document. b) Minimum annual turnover of **66.97 lakhs** in any two years of the last 5 financial years (i.e. 2019-20 to Bid due date 2023-24). c) Provided services of energy efficiency in street light projects in any of the following capacities: Transaction Advisor/ Quality Consultant/Third Party Inspector/ any similar capacities (minimum 1 similar projects - each project with consultancy value not less than **33,50,000/-**. The services should be satisfactorily complete or completed 90% of ongoing work. d) Experience of working with Government/ municipal bodies/ ULBs/ City Corporations in India (minimum 1 similar project).		
10.1	**Key Professionals**	**Qualification**	**No of years of Experience**
a	Energy Auditor-01No (Minimum Man days: Implementation Phase –15 man days per month; O&M Phase – 10 man days per month)	B.E/B.Tech in Electrical and Electronics Engineering.	• Minimum 10 years' experience • Must have carried out at least two similar projects. • Accredited Energy Auditor Certification from Bureau of Energy Efficiency (BEE).

b	Field Engineer(s)- 8 No's (Minimum Man days: Throughout implementation phase O&M Phase –15 man days per month)	B.E/B.Tech/ Diploma in Electrical Engineering	• Minimum 3 years of experience in field related activities while implementing streetlight LED projects/ similar energy efficiency projects
10.2	(vii) Training is an important feature of this Assignment: **Yes** (Impart training to personnel authorized by Authority on aspects like CCMS, performance monitoring, QAP etc.,) (viii) Additional Information in the **Technical** Proposal shall include Schedule 3H consisting of deployment details key professionals, development professional and support staff. In the event of submission of incomplete information in the said form, the technical proposal will be treated as non-responsive.		
10.3	Proposals must remain valid upto 180 days after the submission date valid upto (22/06/2025)		
10.4	Consultants must submit the Technical and Financial Proposal online only.		
10.5	The Proposal submission through only KPP-Portal.		
10.6	Proposals must be submitted no later than the following due date : 23/12/2024 at 16.00 hrs		
10.7	The address to send information to the Authority is: *Executive Engineer (Ele)* *Rajarajeshwari Nagar Zone* *3rd stage, Jawaharlal Nehru Road* *Rajarajeshwari Nagar, BBMP* *E-mail Id: ee.ele.rrn@gmail.com*		
10.8	The Scoring to be given under each of the evaluation criteria are:		
	Evaluation Criteria		**Maximum Points**
	(i) Specific Experience of the Consultancy firms related to the Assignment in the last 5 financial years(2019-2020 to 2023-24)		**20**

	a. Provided project management consultancy in energy efficiency in street light projects in any of the following capacities: Transaction Advisor/ Quality Consultant/Third Party Inspector/ any similar capacities (minimum 2 similar projects) (2 marks for every similar project of minimum consultancy value of Rs.33,50,000/-)	10
	b. Experience of working with Government/ municipal bodies/ ULBs/ City Corporations in India (minimum 1 similar project) (2.5 marks for each similar project)	5
	c. Experience in consulting CCMS implementation in similar energy efficiency projects (LED street lighting projects) (minimum 1 similar project). (2.5 marks for each similar project)	5
	Note: Certificate in respect of a, b & c above the certificate issued by the officer of the rank not below the Executive Engineer/equivalent of the concerned ULB shall only be accepted. For marking purpose, experience of projects awarded before 1 year from the bid due date shall only be considered. Employer's certificate from the Competent Authority is a must. The language of Certification shall be English. **Note**: If the work is carried out for GoI or any state govt., by a firm/consultancy which is aided by an external agency (Eg. World Bank, ADB etc) in such case, work completion certificate from the respective agency/ GoI or any other state government whichever applicable, and MoU with GoI or any other state government has to be furnished.	
	(ii) Adequacy of the proposed work plan and methodology in responding to the TOR	**30**
	a) Understanding of TOR	7.5
	b) Technical approach & Methodology	7.5
	c) Work Plan	7.5
	d) Scheduling/ Work Plan and resource commitment	7.5
	(iii) Qualifications and competence of the key professional staff for the Assignment with required qualification & Experience	**40**
	a) Energy Auditor (1 No's)	30

<table>
<tr><td></td><td>b) Field Engineers(8 No's)</td><td>10</td></tr>
<tr><td></td><td>(iv)The Sole Bidder with local presence (Corporate/Branch Office) - 10 Marks
a. Presence at State Level - 10 Marks
b. presence outside state Level – 05 Marks</td><td>10</td></tr>
<tr><td></td><td>Total points</td><td>100</td></tr>
<tr><td>10.9</td><td colspan="2">*Qualification & experience will be accepted only with valid certificate from competent authority and is subject to confirmation.

The number of points to be given for qualifications and competence of the key professional staff for the assignment are :

<table>
<tr><td>(i) General qualifications
(Level, duration of relevant experience etc.)</td><td>20</td></tr>
<tr><td>(ii) Adequacy for the project
(Experience in methodologies, LED streetlight projects, energy efficiency projects, key professional and managerial skills etc.).</td><td>30</td></tr>
<tr><td>(iii) Qualifications and competence of the key professional staff for the Assignment with required qualification & Experience</td><td>40</td></tr>
<tr><td>(iv) Experience in region.</td><td>10</td></tr>
<tr><td>Total points</td><td>100</td></tr>
</table>

The minimum technical score required to pass is : 75 points</td></tr>
<tr><td></td><td colspan="2">The address for negotiations is:

Executive Engineer (Ele)
Rajarajeshwari Nagar Zone
3rd stage, Jawaharlal Nehru Road
Rajarajeshwari Nagar, BBMP
E-mail Id: ee.ele.rrn@gmail.com</td></tr>
<tr><td></td><td colspan="2">The Assignment is expected to commence on .</td></tr>
</table>

SECTION III. TECHNICAL PROPOSAL - STANDARD FORMS

3A. Technical Proposal Submission Form

3B. Consultancy firm's references

3C. Comments and suggestions on the Terms of Reference and on data services, and facilities to be provided by Authority.

3D. Description of the methodology and work plan for performing the Assignment.

3E. Team composition and task Assignments.

3F. Format of Curriculum Vitae of proposed key professional staff.

3G. Time schedule for professional personnel.

3H. Activity (work) schedule.

3A. TECHNICAL PROPOSAL SUBMISSION FORM

[*Location, Date*]

To:

Executive Engineer (Ele)
Rajarajeshwari Nagar Zone
3rd stage, Jawaharlal Nehru Road
Rajarajeshwari Nagar, BBMP
E-mail Id: ee.ele.rrn@gmail.com

FROM:

(Name of Consultancy firm)

_____

_____

Sir,

Subject: Appointment of Independent Engineering Agency for Implementation of Energy Efficiency Project for streetlights by replacement of existing conventional lamps with LED lamps along with Centralized Control & Monitoring System (CCMS) in Dasarahalli and Rajarajeshwari Nagar Zones of BBMP in Bengaluru, Karnataka - Technical Proposal

---

We, the undersigned, offer to provide the Independent Agency services for the above in accordance with your Request for Proposal dated [*Date*], and our Proposal. We are hereby submitting our Proposal which includes this Technical Proposal and Financial Proposal which are placed in one outer sealed envelope.

If negotiations are held during the period of validity of the Proposal, i.e., before..... [*Date*] we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from contract negotiations.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature:
Name and Title of Signatory:
Name of Consultancy firm:
Address:

3B. CONSULTANCY FIRM'S REFERENCES

Relevant Services carried out in the Last Five financial Years (starting from 2019-20 to 2023-24, as applicable) that best illustrate Qualifications

Using the format below, provide information on each reference consultancy Assignment for which your firm/entity, either individually as a corporate entity or as one of the major companies within an association, was legally contracted. Use one sheet for one assignment.

<table>
<tr><td colspan="2">Assignment Name:</td><td>Country:</td></tr>
<tr><td colspan="2">Location within Country:</td><td>Key professional staff Provided (profiles):</td></tr>
<tr><td colspan="2">BBMP and address:</td><td>No. of Staff deployed:</td></tr>
<tr><td colspan="2">Address:</td><td>No. of Staff-Months; duration of Assignment:</td></tr>
<tr><td>Start Date (Month/Year):</td><td>Completion Date (Month/Year):</td><td>Approx. Value of Services (Rs):</td></tr>
<tr><td colspan="2">Name of Associated Consultants, if any:</td><td>No. of Months of Key professional staff, provided by Associated Consultants:</td></tr>
<tr><td colspan="3">Name of Senior Staff (Project Director/Coordinator, Team Leader) involved and functions performed:</td></tr>
<tr><td colspan="3">Description of Actual Services Provided by Your Staff:</td></tr>
</table>

Consultancy firm's Name:

3C. COMMENTS AND SUGGESTIONS OF CONSULTANCY FIRMS ON THE TERMS OF REFERENCE AND ON DATA, SERVICES, AND FACILITIES TO BE PROVIDED BY THE AUTHORITY

On the Terms of Reference:

1.

2.

3.

4.

5.

On the data, services, and facilities to be provided by the Authority

1.

2.

3.

4.

5

Consultancy firm's Name**:**

3D. DESCRIPTION OF THE METHODOLOGY AND WORK PLAN FOR PERFORMING THE ASSIGNMENT

Technical approach, methodology and work plan are the key components of the Technical Proposal. You shall present your Technical Proposal (maximum of 15 pages, inclusive of charts and diagrams) divided into the following three chapters which will be submitted for the Design Phase and the Implementation Phase of the Project:

a) Understanding of the TOR
b) Technical Approach and Methodology
c) Work Plan,
d) Key Professional, Development Professional and Necessary Support Staff deployment Schedule – Sub Project Specific

a) Understanding of the TOR

In this chapter, the Bidder should explain the understanding of the TOR with the effective implementation & monitoring strategies for implementing the project ensuring cost effective and timely completion.

b) Technical Approach and Methodology

In this chapter, the Bidder should explain the understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. Proposed technical approach & methodology should be tailor made to the assignment. The bidder should highlight the critical areas for each activity and explain how the problems will be addressed and the technical approach that would be followed for the same. The Bidder shall also indicate the ways to improve the implementation of the project by using state-of-the art technologies.

c) Work Plan

In this chapter the Bidder should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Employer), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form 3H. Consultant shall identify the Critical path and suggest measures to ensure that there will be no delays in the list of activities identified under the critical path.

d) Key Professional, Development Professional and Necessary Support Staff deployment Schedule – Sub Project Specific

In this chapter the bidder should propose the structure and composition of Consultancy firm's team for the design phase, implementation and O&M phase. Consultancy firm shall also list the main disciplines of the assignment, the key professionals, development professionals responsible and proposed support personnel.

3E. TEAM COMPOSITION AND TASK ASSIGNMENTS

1. <u>Technical/ Managerial Staff</u>

Sl. No.	Name	Position	Task
1. 2. 3. 4.			

2. <u>Support Staff</u>

Sl. No.	Name	Position	Task
1. 2. 3. 4.			

3F. FORMAT OF CURRICULUM VITAE (CV) FOR PROPOSED KEY PROFESSIONAL STAFF

Proposed Position: _____

Name of Consultant: _____

Name of Staff: _____

Profession: _____

Date of Birth: _____

Years with Firm/Entity: _____ Nationality: _____

Membership in Professional Societies: _____

_____

Detailed Tasks Assigned: _____

_____

Key Qualifications:

[*Give an outline of staff member's experience and training most pertinent to tasks on assignment. Describe degree of responsibility held by staff member on relevant previous assignments and give dates and locations. Use about half a page.*]

_____

Education:

[*Summarize college/university and other specialized education of staff member, giving names of schools, dates attended, and degrees obtained. Use about one quarter of a page.*]

_____

Employment Record:

[*Starting with present position, list in reverse order every employment held. List all positions held by staff member since graduation, giving dates, names of employing organizations, titles of positions held, and locations of assignments. For experience in last ten years, also give types of activities performed and client references, where appropriate. Use about two pages.*]

_____

Languages:

[*For each language indicate proficiency: excellent, good, fair, or poor; in speaking, reading, and writing*]

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, these data correctly describe me, my qualifications, and my experience.

Signature of staff member	Signature of authorized rep. of the firm
Full name of staff member	Full name of authorized representative
Date :	Date:

3G. TIME SCHEDULE FOR PROFESSIONAL PERSONNEL

Sl. No.	Name	Position	Activities	Months (in the form of a Bar Chart)*									
				1	2	3	4	5	...	...	...	n	Number of Months
1.													Subtotal (1)
2.													Subtotal (2)
3.													Subtotal (3)
4.													Subtotal (4)
..													
..													
..													

Signature:_____

(Authorized Representative)

* The Schedule should be for the period of completion of Assignment i.e. 93 months.

a) Implementation phase : 8 months

b) O&M phase : 84 months

c) Financial closure & exit plan : 1 months

Full Name:_____

Title:_____

Address:_____

3H. ACTIVITY (WORK) SCHEDULE:

A. Field Investigation and Study Items

Month wise Program (in form of Bar Chart) ++ *[1st, 2nd, etc. are months from the start of Assignment]*									
Sl. No.	Item of Activity (Work)	1st	2nd	3rd	4th	5th	6th	7th	8th
	_____								
	_____								
	_____								
	_____								
	_____								

++ The Program should be till the period of completion of Assignment.

B. Completion and Submission of Reports

Refer Terms of Reference

1

2

SECTION IV. FINANCIAL PROPOSAL - STANDARD FORMS

4A.Financial Proposal submission form.

4B.Summary of costs.

4C.Breakdown of price per activity.

4A. FINANCIAL PROPOSAL SUBMISSION FORM

[*Location, Date*]

To:

FROM: (Name of Consultant)

_____

_____

Executive Engineer (Ele)
Rajarajeshwari Nagar Zone
3rd stage, Jawaharlal Nehru Road
Rajarajeshwari Nagar, BBMP
E-mail Id: ee.ele.rrn@gmail.com

Sir,

Subject: Appointment of Independent Engineering Agency for Implementation of Energy Efficiency Project for streetlights by replacement of existing conventional lamps with LED lamps along with Centralized Control & Monitoring System (CCMS) in Darasarahalli and Rajarajeshwari Nagar Zones of BBMP in Bengaluru, Karnataka - Financial Proposal.

We, the undersigned, offer to provide the Independent Engineering Agency services for the above subject in accordance with your Request for Proposal dated [*Date*], and our Proposal (Technical and Financial Proposals). Our attached financial Proposal is for the sum of ……..[*Amount in words and figures*] inclusive of all taxes and the sum of ……[*Amount in words and figures*] exclusive of all taxes. ***In the event there is a difference between the quoted amount in the e-procurement portal and the RFP, the amount quoted in the RFP Section 4, 4B shall prevail.***

Our financial Proposal shall be binding upon us subject to the modifications resulting from contract negotiations, up to expiration of the validity period of the Proposal, i.e., [*Date*].

We undertake that, in competing for (and, if the award is made to us, in executing) the above contract, we will strictly observe the laws against fraud and corruption in force in India namely "Prevention of Corruption Act 1988".

We understand you are not bound to accept any Proposal you receive.

We remain

Yours sincerely,

Signature:
Name and Title of Signatory:
Name of the Consultant:
Address:

4B. SUMMARY OF COSTS

1.0 General

1.1 The Price Schedules are divided into separate Schedules as follows:

Schedule 1 : Price Schedule.

Schedule 2 : Summary of Costs

1.2 The Price Schedule do not give a full description of the services to be provided by the Consultancy firms. Consultancy firms are deemed to have read the RFP and schedule to ascertain the full scope of the requirements of the Contract included in each item prior to filling in the prices. The entered prices are deemed to include the full scope as aforesaid, including overheads, and profit.

1.3 If Consultancy firms are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with the Instructions to Consultants in the RFP Documents prior to submitting their Proposal.

2.0 Pricing

2.1 The prices shall be fixed and firm for the duration of the Contract, except as adjusted in accordance with the Contract, if applicable.

2.2 The Proposal Price shall be quoted in the manner indicated and in the currencies specified in the Instructions to Consultants in the RFP Documents. For each item, Consultants shall complete each appropriate column in the respective Schedule 4B, giving the price breakdown as indicated in the Schedule 4C. Prices given in the Schedules against each item shall be for the scope covered by that item as detailed in the ToR or elsewhere in the RFP Documents.

2.3 When requested by the Employer for the purposes of making payments or part payments, valuing changes or evaluating claims, or for such other purposes as the Employer may reasonably require, the Consultant shall provide the Employer with a breakdown of any composite or lump sum items included in the Schedules.

2.4 The Consultant is supposed to quote the lump sum fee, exclusive of Service Tax/GST, in Column B. The % fee so derived will be rounded of to 2 decimal places. All payments pertaining to sub projects will be based on this % as detailed vide Append ix.

Schedule-1: Price Schedule

Description	Lump sum Consultancy Value in Rs/-
Appointment of Independent Engineering Agency for Implementation of Energy Efficiency Project for streetlights by replacement of existing conventional lamps with LED lamps along with Centralized Control & Monitoring System (CCMS) in Dasarahalli and Rajarajeshwari Nagar Zones of BBMP in Bengaluru, Karnataka	

Note: 1. The above quote shall include all the taxes, duties, fees, levies and other impositions likely to be levied under the existing, amended or enacted laws during life of this contract (except GST).

2. GST shall be paid extra as per prevailing rates from time to time, by the Employer.

Note 1): The ceiling cost of the consultancy is as shown in the Summary of Costs. Payments will be made as per stipulations of the Special Conditions of Contract. The break-up of cost as given in formats 4C is to facilitate assessment of reasonableness of costs and conducting negotiations in accordance with clause 6 of the Information to Consultants.

Schedule-2

: SUMMARY OF COSTS:

No.	Description	Amount (Rupees)
I II III IV V	Remuneration for Key professional staff Supporting Staff Office Supplies, Utilities and Communication Reports and Document Printing Other Reimbursable Expenditure if any	
	TOTAL CONSULTANCY COST	

Note: The Consultant shall provide sub activity wise manpower requirement at the time of negotiations.

Date signature:

4C. BREAKDOWN OF COSTS (RS) (APPENDIX E)

Payment will be made only on lumpsum basis on equated monthly instalment for a period of 7 years ; however the following details needs to be provided by the Consultancy firms

I. REMUNERATION FOR STAFF

No.	Position	Name	Rate* (Rs.)	Staff Months	Amount (Rs)
	Key professional staff				
	Sub-Total				
	Sub key professional staff				
	Sub-Total				
	TOTAL				

II. Support Staff

No.	Position	Name	Rate* (Rs)	Staff Months	Amount (Rs)
1 2 3 4					
				Total :	

* Provide the breakup of the rates to show the basic salary, social costs and overheads.

III. Office Supplies, Utilities and Communication

No. Item	Item	Months	Monthly Rate (Rs)	Amount in (Rs)
1. 2. 3. 4.				
	TOTAL			

IV. Reports and Document Printing

No.	Description	Number	No. of Copies	Rate per Copy (Rs.)	Amount (Rs.)
1 2 3 4 5					
	Total				

V. Other Reimbursable Expenditure if any:

SECTION V. TERMS OF REFERENCE (APPENDIX A)

a) Introduction

1.1. With the growth of urban areas, the municipalities are spending large amounts of their revenue on energy for providing services such as street lights, water supply, etc., Presently the streetlights in the urban areas have a mix of mercury vapour lamps, metal halide lamps, sodium vapour lamps, incandescent lamps, CFLs etc. and involve significant power charges payable to ESCOMS out of ULB resources.

1.2. Light Emitting Diode (LED) lamps are proving to be more energy efficient and hence the latest trend is to moving towards installation of LED street lamps in the urban areas. Many cities in India like Vishakapatnam in Andhra Pradesh, Jhalawar in Rajasthan, South Delhi Municipal Corporation, Alappuzha in Kerala, Agartala in Tripura, Aligarh in Uttar Pradesh and some other cities have already moved forward on this initiative.

1.3. In this background, Government of Karnataka is implementing Energy Efficiency Project for streetlights by replacement of existing conventional lamps with LED lamps along with Centralized Control & Monitoring System (CCMS) in all Smart Cities/ Urban Local Bodies of Karnataka.

1.4. Authority now intends to procure services of an Independent Engineering Agency to assist Authority in inspection, implementation monitoring, ensuring the quality of original / repair works and routine maintenance carried out and monitor compliance of the Concessionaire with the performance obligations under the Contract.

b) Objectives

The objectives of the Project are:

a) Replacing of existing non-LED streetlights with LED

b) Establishment of Centralized Control and Monitoring System (CCMS) for Real time control and monitoring system for smart street lighting including remote switch-off, dimming, smart metering and surge protection and theft detection mechanism. CCMS shall be established in the office premise of ULB. Sensor based dimming provision may also be considered as per the need and financial requirements.

c) Integration of the existing LED streetlights with the CCMS.

d) O&M of LED lighting system for 7 years and capacity addition as per approved rates.

e) Capacity building to ULB Engineers.

c) General Scope of Services:

c.1 The Independent Engineering Agency would provide his services in accordance with Good Industry Practice. For this purpose, the Independent Engineering Agency shall undertake, inter alia, the following activities and where appropriate make suitable suggestions:

c.2 Act on the ULB's behalf as the Authority's representative regarding all contact with the Concessionaire unless expressly indicated otherwise;

(i) Verify the performance of the Concessionaire in accordance with the Schedules of the Contract and make recommendation to the Employer/ Authority. The Independent Engineering Agency shall inform and advise the Authority & ULB in a timely manner all matters relating to the quality and performance standards of the Project;

(ii)Identify and report work which fails to comply with the specifications and requirements of the Contract. Whenever considered necessary or advisable to ensure correction of defective work, the Independent Engineering Agency may require inspection or testing of such work, whether or not such work be then fabricated, installed, or completed;

(iii)Review, approve or disapprove designs, drawings, samples, and other submissions of the Concessionaire to determine compliance and with the requirements of the Operator Contract;

(iv)Address issues relating to specific site conditions, design modifications.

(v)Review matters related to supervision of safety and environment management measures by Concessionaire.

c.3 The Independent Engineering Agency shall attend regular meetings ("Project Review Meetings" or "PRMs") with Authority and Concessionaire, to be held at least once a month during the O&M period. The ICE shall take notes at the meetings and produce the PRM minutes and provide a copy to each stakeholder who attended or would normally be present at the meeting. The PRM minutes should highlight all elements of the project on which there are delays or other problems with summary of actions taken or to be taken to resolve these with clear allocation of responsibility for each.

c.4 ICE shall constantly assess, monitor and review the achievement of Performance Targets as per the O&M Contract **Role of Independent Engineer Agency** The Independent Engineering Agency is expected to play a positive and independent role in discharging its functions, thereby facilitating smooth operation and management of LED street lighting project, although not limited to the following,

c.5 The principal scope of services of the ICE will be to:

Implementation Phase (8 months):

a) Understanding the Concessionaire's technical proposal as per their Bid submitted and accordingly advising Authority on technical aspects of project implementation.

b) Ensure that during the Conditions Precedent Period both the parties (Authority & Concessionaire) adhere to the terms and conditions of the RFP & Concession Agreement signed between Concessionaire & Authority. In case of extension/dispute, the Independent Engineering Agency shall guide the Authority in the interest of the Project.

c) Assisting Authority in overseeing the Asset Identification and marking, truing up of inventory and accordingly truing up of EMI, in coordination with Concessionaire.

d) Validate the pole marked by the Concessionaire and each Street lighting pole covered under this Project.

e) Coordinating with ESCOM and the ULB/s in finalising the pre-requisites of implementation activity.

f) Ensuring establishment of CCMS in BBMP as early as possible

g) Ensuring Circuit-wise replacement and upon completion of each circuit, the respective circuit must be linked to CCMS immediately for switching on & off regularly.

h) Confirming quality of equipments /items regularly which are installed by the concessionaire accordance to Specifications/certifications mentioned in RFP document and submitting reports in this regard to the Authority.

i) Assisting the authority in returning all energy meters removed by the PPP concessionaire to respective ESCOM.

j) Assisting the authority for revising sanctioned load as per connected load.

k) ICE must confirm standard safety and protection against all kind of electrical faults prior to issuing equipment installation certificate.

l) Assisting Authority in obtaining necessary approvals from different departments for commencement of implementation.

m) Approval of Equipment/ LED streetlights Installation Plan.

n) Prepare project implementation and monitoring schedule for implementation and O&M phase based on the life cycle of the fixtures, CCMS components and other requisite activities and submit to Authority to ensure proactive measures rather than reactive measures.

o) Independently review and monitor works carried out to ensure quality and performance compliance by the PPP Concessionaire; Undertake regular inspections, site visits and quality audits of works and report the same to Authority;

p) Review matters related to statutory requirements, safety and environment management measures adopted by PPP Concessionaire;

q) Testing, validation, quality assurance and certification of LED street lights, smart meters and CCMS system, in order to ensure the sustainability and high quality of the proposed smart systems.

r) Issue Equipment Commissioning Certificate with respect to the Technical Specifications;

s) ICE must validate guaranteed energy savings during O&M period of the project and variations on comparison with presumptive consumption details and submit the report to Authority for further evaluation.

t) Scrutinise and submit the works invoiced periodically by the PPP Concessionaire for having satisfactorily executed/ installed & commissioned the system;

u) Assist Authority in monitoring performance obligations of Concessionaire and contract monitoring, including levy of penalties, etc.,

v) Prepare information material and conduct internal training programmes for capacity building of Authority's staff.

w) Other roles and responsibilities as mentioned in PPP Concessionaire documents.

O&M Phase (07 years from Commercial Operations Date (COD)):

a) Prepare an annual activity plan and present to Authority concerning financially attractive investments to reduce energy costs.

b) Analysis of CCMS data and recommendation for improving the performance of LED streetlights. Prepare and submit periodic energy audit reports on based on the CCMS data and the performance of the proposed LED system. Suggest on the possible areas of energy savings and recommend action plan for the same.

c) Establish a methodology on accurate calculation of the specific energy consumption of various products/ services or activity of the firm.

d) Validation and certification of actual energy savings and recommendation for periodic payments to Concessionaire.

e) Analyse equipment performance with respect to energy efficiency. Ensure proper functioning and calibration of instrumentation required to assess level of energy consumption directly or indirectly.

f) Certification of penalty for non-achievement of guaranteed savings / event of default, recommendations during force majeure event, penalty for not meeting the performance indicators, etc.,

g) Reconciliation of energy savings with ESCOM bills in accordance to tariff rates of respective financial year.

h) Calculating benefits of energy savings below the uptime of 99%, power shutdowns and benefits must be returned back to AUTHORITY.

i) Monitoring of fund utilisations for the project & recommending corrective actions, as required.

j) Assist the Authority in estimating savings and coordinating with ESCOM's, for reducing sanctioned load of each of the street light metering point periodically based on the new load after the installation of LED lights.

k) Submit monthly/Flash reports to the Authority during the project tenure and participate in all the meetings relevant to the project as per the requirement of the Authority.

l) Coordinate with ESCOM, Authority and other relevant stakeholders, wherever necessary, for smooth implementation of the project during the implementation and O&M period.

m) Collecting monthly Energy Bills (Street lights Component) from respective ESCOM's, assessing, validating and auditing the bills as per the Key Performance Indicators (KPI) mentioned in GO and RFP. Certifying and recommending the bills for payments to the AUTHORITY. Further ICE must submit the bills to AUTHORITY before **12th day of the respective month**.

n) Certifying and recommending the monthly payment of EMI/Annuity for the concessionaire as per the Key Performance Indicators (KPI) as per guidelines of GO and RFP and submitting the same to AUTHORITY before **15th day of the respective month**.

o) Guiding authority in capacity addition of new LED lights under various funds and integrating the same with to CCMS.

p) Review matters related to regulatory & statutory requirements, safety and environment management measures adopted by PPP Concessionaire

q) Review the compliance of the PPP Concessionaire with the performance obligations under the contract.

r) Scrutiny the works invoiced by the PPP Concessionaire for having satisfactorily operated & maintained the system;

s) Develop and manage training programme for energy efficiency at operating levels.

t) Create knowledge bank on sectoral, national and international development on energy efficiency technology and management system and information denomination.

u) Any other obligations that are deemed to be the responsibility of the Independent Engineering Agency as per the terms of the agreement entered between the Authority and LCO.

v) Other roles and responsibilities as mentioned in PPP Concessionaire documents.

b) Detailed Scope of Work

General

a.1 The tasks to be provided by the Independent Engineering Agency are listed below. In addition, the scope of services would also include such other functions as required to be undertaken as would in normal course be associated with Independent Engineering Agency.

a.2 The Independent Engineering Agency shall discharge its duties in a fair, independent, impartial and efficient manner, consistent with the highest standards of professional integrity and Good Industry Practice.

a.3 The Independent Engineering Agency shall interpret the requirements of the Concession Agreement regarding performance of the Parties. The Independent Engineering Agency shall inform and advise the Authority/ULB and the Concessionaire in a timely manner all matters relating to the quality and Performance Standards of the Project;

Project details:

- The project is proposed under PPP model with implementation and Operation & Maintenance (O&M) by the selected Concessionaire, wherein the entire investment would be brought in by the private sector (Concessionaire).

- The project period shall consist of a) implementation period of 8 months for compliance period and LED implementation and b) O&M period of 07 years of

operations and maintenance by the Concessionaire. The Authority shall pay the PPP Concessionaire the lowest EMI/ Annuity approved through tender.

- In case, partial implementation of LED has already happened in the city, the PPP Concessionaire is expected to integrate the same with CCMS and maintain such lights also during the Project Period.

- **Buy-back of existing Non-LED luminaries:** The selected bidder's annuity/EMI quote shall reflect the price offered for buy back of existing non-LED luminaries.

- The repayment towards capex & opex to the Concessionaire shall be distributed over the project period on an annuity/ EMI basis.

- The PPP Concessionaire will recover his capital cost for LED retrofitment and O&M cost for street light management in 07 years on EMI/Annuity basis, out of the accrued SFC savings due to reduction in energy charges payable to ESCOM, savings in O&M cost and tariff incentives by ESCOM for LED Implementation.

- Payment mechanism shall be through an Escrow account between the Concessionaire and Authority. The payment duration shall be periodically as per the CAPEX requirements for LED project, derived by the Independent Engineering Agency and approved by Authority.

- For future expansion of LED lighting by the same PPP Concessionaire, it is proposed to limit to a maximum of 25% capacity addition under the contract subject to a maximum of 5% per annum.

- The basis for pricing for capacity addition for future expansion shall be as per rates fixed by BBMP after following due process, based on the prevailing market rates for different LED luminaries/ fixtures & accessories from time to time.

- SFC global protection for energy charges shall be used only for payment of EMI/Annuity. Any capacity addition during the project period will be through additional allocation by ULB/SPV out of its own fund resources (SFC untied grants/ municipal funds / Nagarothana, etc.,).

- The data analytics of the smart street lighting system through CCMS shall be utilized for informed decision making for future interventions. The data may be utilized by ULBs/ Nodal agencies/ decision makers in understanding the overall cost, consumption,

efficiency of operations, improvement in livability index, cost benefit through savings, reduction in manual operations, as a monitoring tool to validate the payment of Annuity/ EMI, etc. Some of the key parameters can be monitored on daily basis for effective and informed decision making.

- **Key performance indicators:**
  - Uptime of minimum 98% of all LED lamps in the project area. Penalty of 0.1 % of EMI payable for the month, for each such day/days, witnessed/ documented in CCMS as per Govt. order.
  - Achieving guaranteed savings agreed under the Concessionaire Contract, else stiff penalty in tune with fall in savings.
  - Penalty for not achieving Key Performance Indicators (KPIs) – The modality of periodic monitoring and reporting of power consumption shall be through CCMS and Third-party monitoring mechanism through Independent Engineer Agency.
  - Incentive, in case of Concessionaire achieving more than the guaranteed savings.

Phase-I: Planning, designing and procurement assistance

The tasks to be completed under this assignment are detailed below:

Compliance Period:

- Review of earlier studies, historical data & project reports/ documents, baseline study report prepared by transaction advisor, technical proposal of Concessionaire relevant to the Project. Accordingly advising Authority on technical aspects of project implementation.
- Ensure that during the Conditions Precedent Period both the parties (Authority & Concessionaire) adhere to the terms and conditions of the RFP & Concession Agreement signed between Concessionaire & Authority. In case of extension/ dispute, the Independent Engineering Agency shall guide the Authority in the interest of the Project.
- Prepare a road map for guiding the overall investment, specifying the physical and non-physical investments, a financiers' matrix and the corresponding resources needed based on the availability of funds for the project.
- Prioritize the activities of the projects/ components and prepare a tentative implementation plan with roles and responsibilities of each of the stakeholders. Acting as an early warning system for the Authority. Review O&M options and prepare a strategy for improved implementation, including technical procedures to ensure efficiency and sustainability and proper financial, accounting and managerial arrangements for O&M.

- Prepare project implementation and monitoring schedule for implementation and O&M phase based on the life cycle of the fixtures, CCMS components and other requisite activities and submit to Authority to ensure proactive measures rather than reactive measures.
- Examine the current provision of the services, and the institutional arrangements. Include a financial assessment in terms of extent of O&M costs involved (before and after the project) and budgets, extent of cost recovery in case of sectors where user charges are involved, tariff implications and modeling of various scenarios; including financial projections for 10-15 years.
- Update the financial assessments for the Authority carried out during the project development process, based on updated project costs, sources of finance/financing plan, revised repayment schedules if any, project related cash-flow statements etc.
- Identify the risk & prepare mitigations measures.
- Support Authority to access financing from State government institutions and Financing Institutions and other government and quasi-government sources as per need.
- Support Authority in dovetailing with other ongoing Government schemes for technical completeness.
- Identify & prepare training requirements.
- The Independent Engineering Agency shall comply & carry out the assignment as per the guidelines issued by MoUD/GoK/Authority from time to time over the entire period of the contract.

Environment Safeguards

- Review applicable environmental laws/ rules/ regulations with a view to define the specific clearances/ approvals required to be obtained by Authority and Concessionaires from different organizations.
- Also, prepare necessary documentation to facilitate Authority to obtain necessary clearances.
- In case of any subsidy available from National/ State level schemes, the details of the same shall be updated to the Authority regularly. Assistance to avail such subsidies, if applicable, shall also be facilitated by ICE.

Implementation Phase:

1. Overseeing Asset Identification and Marking

- The Independent Engineering Agency (IE) shall participate in conducting the joint verification for asset identification. IE shall capture details for each and every street light point along with particulars of ward number, street name in consultation with Authority, switching point, energy billing meter or connection number, feeder panel,

switching, protection, communication and control equipment, pole number, pole spacing/ span, fixture height, existing fixture type; rating & numbers for particular pole etc.

- IE shall ensure quality protocol is ensured during the installation to assess the life span of smart systems including the smart meters, CCMS system, other IT infrastructure etc taking into the failure rate of devices, depreciation etc.
- IE shall certify the asset register inventory created jointly by the Authority/TA and Concessionaire that shall define physical boundary of the project in accordance with the guidelines set out at Schedule 3.
- Ensuring all LED Luminaires are controlled through software interface in both computer and mobile platforms and all circuit parameters like voltage, current, KWH, KW, power factor, energy meter no. , sanctioned load, KVA, uptime and other essential parameters must be displayed and confirming remote operation.
- IE shall also validate the pole marked by the Concessionaire each new Street lighting pole covered under this Project.

2. Approval of Equipment / LEDs Installation Plan

ICE shall Scrutinize the Concessionaire's detailed work program & implementation method including environmental safety, personnel & public issues and guide the Concessionaire in preparation of supervision schedule & work plan. IE shall validate and certify the ward wise LED street lights Installation Plan prepared by the Concessionaire and submitted to Authority, within [7] days of receipt of the same. This shall include, but not limited to, the following:

a. Verification and certification of the existing street lighting inventory and project scope;
   (i) Categorization of Street Lighting Point.
   (ii) Details of switching points/ feeder panels, energy billing meter (including connection number), switching, protection, communication and control equipment, etc.
   (iii) Details of infrastructure including pole type, pole ownership, pole span/ spacing, pole height, fixture installation height, cable/ conductor type and its length, outreach arm/bracket type and its length etc. for each switching point. This should also include physical condition assessment of the assets and recommendations regarding replacement/ upgradation requirements.
   (iv) Number, type, rating, working condition etc. of existing fixtures on each pole;
   (v) Validation of Single Line Diagrams (SLDs), indicative maps and any other details captured during asset verification;

(vi) Approval or rejection of the findings set out therein, including the recommendation, if any, to remove or add certain Project Street Light Points from the scope of the Project.

b. Validation and Approval of Equipment Installation Plan:

(i) Switching Point wise Feeder Panel installation plan, including adequacy of proposed KVA72 rating of proposed feeder panel, recommendations regarding clubbing/ optimization of switching points etc.

(ii) Infrastructure improvement proposals including conductor/ cable replacements, bracket/ outreach arm replacements, pole replacements etc., if any, in accordance with the scope defined in the Agreement.

(iii) Pole wise proposed LED Luminaire configuration (numbers, ratings etc.), including its validation.

3. Installation activity

- Assist Authority for day to day installation supervision, contract administration, recording progress and inform Authority immediately, in case of any delay.
- Deploy full time well qualified and adequately experienced field engineer & system analyst, as described in this RFP, to assist Authority during implementation phase.
- Assess the adequacy of the Concessionaire input in material, labour and installation methodology and provide advisories when required.
- Establish quality assurance system including verification of source of material and certification. Assist the Authority with respect to quality control procedures, quality control of the works and disseminating quality control manual.
- Advise the Authority on carrying out and documenting the planned quality control tests as part of the works progress reports. Suggest mid-course corrections, if any, as required for project control.
- Conduct third party inspections, if necessary, as decided by the Authority. Ensure setting up of quality control laboratory by the Concessionaire or list out Government laboratories (CPRI)/ NABL accredited laboratories for conducting quality control tests.
- Conduct/Supervise quality tests as required on materials/equipment supplied/ works executed at site and in the approved labs approved and assist the Authority engineers in witnessing tests at manufacturers' site as per the standard procedures and best engineering practice laid down and certify the test results.
- Assist Authority / Concessionaire in preparation of completion reports.
- During the contract period, assist the Authority in overseeing Concessionaire's responsibilities. Assistance for resolution of all contractual issues including examining the Concessionaire's claims for variations/extensions or additional compensations etc., and prepare recommendations for approval by the Authority.

- Assist the Authority's staff on establishing and operationalizing the institutional and financial arrangements envisaged for O&M.
- Assist the Authority in final certification of the bills for payment of EMI/annuity.

4. Issuance of Equipment Commissioning Certificate

Post equipment installation by the Concessionaire, the Independent Engineering Agency shall be required to issue Equipment/ LEDs Commissioning Certificate to the Concessionaire as per the provisions of the Agreement and in accordance with the scope outlined below:

a. Verify the quantities of equipment/ material installed by the Concessionaire;
b. Verify adherence to the Technical Specifications, quality of installations and workmanship;
c. Verify kW loading at respective switching point/ feeder panel level:
   (i) kW measurements for select switching points / feeder panel level shall be validated against the estimated kW load on the switching point considering the different ratings and numbers of LED Luminaires.
   (ii) Switching Point wise actual kW, estimated kW and % variation in actual kW w.r.t. estimated kW. Feeder Panels with % variation of more than +10% would be brought to the notice of Authority.
   (iii) Sample measurements regarding voltage drops in cables used.
   (iv) ICE must confirm standard safety and protection against all kind of electrical faults.
d. Assist Authority in adhering to the Contractual obligations of Authority as per the Concessionaire Agreement and issuance of relevant certificates/ approvals for commencement of Commercial Operation Date (COD).

5. Operation and Maintenance (O&M) Period:

During O&M period of 07 years, the IE shall monitor the operations and maintenance activities undertaken by the Concessionaire so as to ensure compliance with the Concessionaire's Contract. The specific activities to be undertaken would include the following:

a) Assist Authority in reviewing the O&M plan of entire project.
b) Inspect and review the operation plan and all other Key Performance obligations of Concessionaire set out in the Contract including fixing up of baseline parameters.
c) The baseline consumption shown in the RFP is subject to restatement either by increase or decrease, once the replacement work of LED bulbs along with static smart

metering and CCMS is completed. The baselines would be restated in the following manner:

a. During release of existing conventional bulbs and Energy meters by the Concessionaire, a joint inventory along with Transaction Advisor and Authority shall be taken duly recording the pole wise data covering type of bulb, number of bulbs, wattages of each bulb, pole number, Geo-positions etc on a daily basis during replacement.
b. At the end of the replacement the aggregate of each type, wattage etc would be worked out by the Independent Engineering Agency for restatement based on the actual numbers. Once this is established and jointly agreed upon by the parties (i.e. Concessionaire, Independent Engineering Agency, Transaction advisor and Authority), the "baseline consumption" remains firm throughout the project period. This would be the basis for arriving at the guaranteed savings month on month.
    i. As per RFP, the total wattage of LED bulbs post replacement is estimated to be _____ Watts. After the successful implementation of the Project the Independent Engineering Agency shall work out the actual wattage of LED bulbs replaced, which will form the basis for readjustment of EMI.
    ii. Post installation of LED, the sanctioned load of the street lighting system will be significantly more than the connected load. Therefore, in order to realize the benefit of reduced energy consumption after the installation of LED lights, Authority will have to get the sanctioned load reduced revised proportionately for each of the street lighting installations/ metering point. Independent Engineering Agency will assist the Authority take-up this with respective jurisdictional ESCOM so that sanctioned load of each of the street light metering point is reduced based on the new load after the installation of LED lights.
    iii. Independent Engineering Agency shall be responsible for certification of energy savings, penalty for non-achievement of guaranteed savings/ event of default, recommendations during force majeure event, penalty for not meeting the performance indicators, etc.,
    iv. Independent Engineering Agency shall co-ordinate with respective jurisdictional ESCOM, Authority and other relevant stakeholders, wherever necessary for smooth implementation of the project during the implementation and Operations & Maintenance period.
    v. Independent Engineering Agency shall ensure all regulatory and statutory compliances connected with the Project.
    vi. Any other obligations that are deemed to be the responsibility of the Independent Engineering Agency as per the terms of the agreement entered between the Authority and Concessionaire.

c) Submit monthly/ flash reports to the Authority during the project tenure and Participate in all the meetings relevant to the project as per the requirement of the Authority.

d) Regular site inspections to ensure Key performance indicators and equipment damages and depreciation under different circumstances and initiating action for repair/replacement through LCO and authority.

e) Monitor the compliance of the Concessionaire with respect to all Key Performance Indicators and advise Authority regarding the failure of the Concessionaire in achievement of any Performance Target(s).

f) Monitor, assess and report achievement of obligations as per the Concessionaire Contract.

g) Review report submitted by Concessionaire on project progress and O&M.

h) Review report on project operational details submitted by Concessionaire.

i) Review the works with the required quality of materials, workmanship and equipment's carried out by the Concessionaire.

j) Review the adequacy of arrangements proposed by the Concessionaire at customer premises to ensure the project requirements.

k) Supervise, review and report progress on implementation of works.

l) Assess the validity of any adjustments, cost overruns to the nature and value of projects proposed by the Concessionaire for achieving the required Performance targets and to assist the Authority in arriving at adjustments to the Contract in this respect, acceptable to both the Authority and the Concessionaire.

m) Advice Authority on any relaxation of Performance Indicators target values for the implementation Period and the Operations and Management Period that may be requested by the Concessionaire as a result of failure on the part of Authority with the Notice to correct issued to them by the Concessionaire.

n) Monitor the compliance of the Concessionaire with respect to all Performance Indicators and advice Authority regarding the failure of the Concessionaire in achievement of any Performance Target (s) or inconsistencies. IE shall carry out random checks at the critical locations and at any Customer premises to verify the reasonableness of achievement of Performance Targets by the Concessionaire during the O&M Period.

o) Scrutinise invoices raised by the Concessionaire for works done as per contract and make recommendations to Authority.

p) Identify and report work, goods and equipment which fails to comply with the specifications and requirements of the Operations Agreement and Third Party Contracts. Whenever considered necessary or advisable to ensure correction of defective work, the ICE may require inspection or testing of such work, whether or not such work be then fabricated, installed, or completed;

q) review designs, drawings, samples, and other submissions of the Concessionaire to determine compliance and with the requirements as per the contract, make recommendations;
r) Analysis of CCMS data and recommendation for improving the performance of LED streetlights
s) Validation of actual energy savings and recommendation for payments to Concessionaire
t) Reconciliation of energy savings with ESCOM bills.
u) Monitoring of funds utilisations for the project & recommending collective actions, as required.
v) Review matters related to supervision of safety and environment management measures in respect of installation works and the Project;
w) assist Authority in issuing different certificates;
x) participate in review meetings of the periodic updates of the Operator's Service Improvement Plans and provide comments from the perspective of plan monitoring; and
y) Monitor, assess and report achievement of obligations of stakeholders in accordance with the Operations Agreement.
z) In addition to the daily responsibilities, conduct a general inspection at least once a week and as and when exigencies require to ascertain conformity with O&M Plan;
aa) Monitor overall quality of Operation and Maintenance activities
bb) Undertake periodic review of the various records and registers to be maintained by the Concessionaire and suggest suitable remedial measures/ procedures, where necessary.
cc) Prepare periodic project progress reports describing the physical and financial progress, highlighting impediments to the quality and progress of the works and remedial accounts.
dd) The IE shall comply & carry out the assignment as per the guidelines issued by MoUD/GoK/Authority from time to time over the entire period of the contract.
ee) The ICE shall prepare and submit to Authority & CMC, Monthly Reports including the following:
ff) Report on installation & O&M schedule
    i) Report on Performance target
    ii) Report on Tests
    iii) Report on analysis of CCMS data
    iv) Report on notices issued
    v) Issues, if any, with regard to the works and management along with the details of the action taken for the resolution of the same;
    vi) Report on issues, if any, with regard to invoices and payments; and

vii) Photographic record of works over the previous tenure and project period.

viii) Report on monitor compliance with performance targets to determine eligibility for progress payments to be made to the Concessionaire and any eventual bonus payments or deductions of penalties

ix) Report in conducting the Annual Audit and review of performance of the Concessionaire;

6. Training

- Training of Authority's staff on installation, management and activities related to on-job training on project implementation and quality and contract management and O&M.
- The said trainings shall be the regular trainings as part of project implementation /on the job and the same shall be included in the financial quote.

7. Legal

- Assist Authority in addressing and complying with all legal, statutory and mandatory requirements with regard to social and environmental issues.
- Assist Authority in interpreting and applying the various legal provisions of the contract documents, and in amicably resolving disputes.
- Assist ULBs/SPV in getting clearances from the other government departments/ agencies where ever necessary.

b) Meetings, Records and Reporting :

b.1 **Meetings**

The IE shall attend regular meetings ("Project Review Meetings" or "PRMs") with Authority, the Concessionaires, and relevant stakeholders to be held at least once a month during the Project Period to report on progress and quality of work performed by the Concessionaires and to discuss problems or other pertinent matters relating to the work. The IE shall take notes at the meetings and produce the PRM minutes and provide a copy to each stakeholder who attended or would normally be present at the meeting. The PRM minutes should highlight all elements of the project on which there are delays or other problems with summary of actions taken or to be taken to resolve these with clear allocation of responsibility for each.

b.2 **Reporting requirements: (**Appendix B)

IE shall prepare a schedule of reports and the frequency of submission and shall finalise the same in consultation with Authority. The indicative schedule is provided below:

Monthly Progress Reports	5 copies+ a soft copy
Quarterly and Periodic Reports	5 copies+ a soft copy
Final Completion Report at end of Implementation Period	5 copies + a soft copy

In addition to attending the review meetings hereinabove mentioned, the IE shall also participate in emergency or extra-ordinary meetings of the Parties held to deal with any Force Majeure Event or other exigencies.

a) The IE shall prepare and submit to Authority, Progress Reports in the schedule mentioned above of Project as mentioned above in clause (ff) under O&M assistance.

b.3 The IE shall, in the ordinary course, maintain records of the activities undertaken by it in discharge of its functions and responsibilities. This would include records/ reports as mentioned above in clause (ff) under O&M assistance and the following:

a) Manpower deployed and other organizational arrangements of the ICE;

b) Reviews of documents submitted to it by the Concessionaire to implement, such as manuals, designs, Drawings, as Built drawings, schedules, plans and reports;

c) Inspections undertaken and notices/ instructions issued to the Concessionaire;

d) Review of compliance with Concession Agreement and Third Party Contracts;

e) Payment of Performance Fee, requisite Bank Guarantee and deduction of other adjustments/penalties for shortfall in performance

f) Force Majeure Events;

g) Breaches and defaults by the Parties; and

h) Any other report as may be reasonably required by Authority or as may be necessary to give effect to the provisions of the Agreement.

b.4 The ICE shall prepare a report on Hand over Requirements, and compliance of the same by the Concessionaire.

b.5 The ICE shall prepare any other report as may be reasonably required by Authority or as may be necessary to give effect to the provisions of the Agreement.

c) DURATION

The duration of the contract is 12 months from date of commencement of the service which shall be termed as the contract period. The prices shall be quoted for a period of 12 months period and the same shall be extended only after ascertaining satisfactory performance of the contract. If the performance of the contract is satisfactory, BBMP may extend the contract period by 12 months on

the same terms and conditions and approved rates of original Tender. However, under any circumstances, the total duration of contract shall **not be more than 3 years continuously from the initial contract date. BBMP is the sole authority at** its **discretion for the extension or otherwise, on completion of each contract period after assessing existing performance of the services.**

d) INDEPENDENT ENGINEERING AGENCY TEAM AND SKILL REQUIREMENT

It is envisaged that the prospective Independent Engineering Agency will deploy skills internally or procure them from outside experts.

a) **Energy Auditor (1 no)–** Energy Auditor shall be a professionally qualified B.E/B.Tech in Electrical and Electronics Engineering with minimum 10 years' experience and must have carried out at least 2 similar Projects. Accredited Energy Auditor Certification from Bureau of Energy Efficiency (BEE). Must have knowledge of Energy Efficiency Standards/ Regulatory framework of Bureau of Energy Efficiency.

The Energy Auditor is expected to be well versed with commercial & regulatory aspects of power, energy efficiency and energy accounting in the power utilities, computation of energy bills and monitoring the energy savings & estimation of capital and operating cost for lighting system, conducting financial analysis and due-diligence and structuring energy efficiency and renewable energy projects based on EPC/ PPP models, conducting energy audits and developing monitoring and verification mechanisms for energy savings. He is expected Ensure Quality, safety and protection during implementation phase and certifying the quality reports. Experience as Energy Auditor on behalf on Independent Engineering Agency in Implementation of Public Street lighting energy efficiency project for LED retrofitting along with CCMS is desired.

The Energy Auditor is expected to be well versed with the preparation of technical reports, preparation of technical specifications along with development of performance specifications specific to street lighting and various electrical system components, relevant to electrical distribution and street lighting systems. She/he is expected to be well versed with issuance of Equipment Commissioning certificate, certification of monthly energy bills, contract monitoring, similar activities to this assignment. Implementation of CCMS in tier 2 cities & experience in analysing the CCMS data and evaluation of the technical feasibility for alternate energy saving options for street light energy efficiency projects implemented through EPC /PPP route is desirable.

The Energy Auditor shall be available for minimum 15 man days per month during the Implementation Period and minimum 10 man days per month during O&M Period, after commencement of COD.

b) **Field Engineer(8 no's) –** The Field Engineer shall be a professionally qualified Degree/ Diploma in Electrical Engineering equivalent with minimum 2 years of experience in field related activities while implementing streetlight LED projects/ similar energy efficiency projects.

The Field Engineer shall assist in conducting survey for implementation of street lighting projects and leading survey teams which would conduct street lighting surveys.

The field Engineer conduct regular field inspections at-least thrice a week to ensure key performance indicators and report the observations to authority/ ICE officials.

The Field Engineer shall be available throughout the Implementation Period and as & 15 days/ month during O&M Phase.

c) **Other Support Staff, as felt required by Independent Engineering Agency.**

e) DATA, SERVICES AND FACILITIES TO BE PROVIDED BY AUTHORITY

The following services, facilities and property to be made available to the Independent Engineering Agency by Authority. (APPENDIX D)

a. Access to relevant Data from the respective Authority that may be required to effectively carry out the tasks of the Independent Engineering Agency as envisaged in the project.

b. Office facilities shall be provided by respective ULBs.

f) FINAL OUTPUTS (i.e., REPORTS, RECORDS, etc.) THAT WILL BE REQUIRED OF THE INDEPENDENT ENGINEERING AGENCY

The Independent Engineering Agency shall submit five (5) hard copies and one (1) soft copy (on CD) of the reports to the Authority.

g) REVIEW COMMITTEE TO MONITOR INDEPENDENT ENGINEERING AGENCYS WORK

A review committee constituted by the Authority monitors the IE's work and review the invoices raised by the IE before releasing payments.

h) PROCEDURE FOR REVIEW OF PROGRESS REPORTS, INCEPTION, STATUS, FINAL DRAFT AND FINAL REPORTS

The Review Committee would monitor progress of this Assignment. The IE shall submit all the deliverables as per this Terms of Reference related to this Assignment to Authority which would be reviewed by the Committee.

i) LIST OF KEY PROFESSIONAL POSITIONS WHOSE CV AND EXPERIENCE WOULD BE EVALUATED. (This should be same as indicated in Clause 3.3 (iv) of Data Sheet to Information to Consultants.)

Key Professionals	Qualification	No of years of Experience
Energy Auditor-01 No (Minimum Man days: Implementation Phase – 15 man days per month; O&M Phase – 10 man days per month)	B.E/B.Tech in Electrical and Electronics Engineering.	• Minimum 10 years' experience • Must have carried out at least two similar projects. • Accredited Energy Auditor Certification from Bureau of Energy Efficiency (BEE).
Field Engineer (8 no's.) (To be available Throughout the implementation phase O&M Phase – 15 man days per month.)	Degree/ Diploma in electrical & electronics Engineering	• Minimum 3 years of experience in field related activities while implementing streetlight LED projects/ similar energy efficiency projects.

All above professionals should have working knowledge in IT & Basic/conversational knowledge in Kannada language

SECTION VI: CONTRACT FOR INDEPENDENT ENGINEERING AGENCY'S SERVICES

Between

_____

[BBMP]

and

_____

[Name of Independent Engineering Agency]

Dated:

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I. FORM OF CONTRACT

This CONTRACT (hereinafter called the "Contract") is made the _____ day of the month of _____, 20__, between, on the one hand, _____(hereinafter called the "Authority") and, on the other hand, _____(hereinafter called the "Independent Engineering Agency").

WHEREAS

(a) the Authority has requested the Independent Engineering Agency to provide certain consulting services as defined in the General Conditions of Contract attached to this Contract (hereinafter called the "Services");

(b) the Independent Agency, having represented to the Authority that they have the required professional skills, and personnel and technical resources, have agreed to provide the Services on the terms and conditions set forth in this Contract; and

NOW THEREFORE the parties hereto hereby agree as follows:

1. The following documents attached hereto shall be deemed to form an integral part of this Contract:

(a) The General Conditions of Contract (hereinafter called "GC");

(b) The Special Conditions of contract (hereinafter called "SC");

(c) The following Appendices:

Appendix A:	Description of the Services	_____
Appendix B:	Reporting Requirements	_____
Appendix C:	Key Personnel and Sub-Independent Agency	_____
Appendix D:	Duties of the Authority	_____
Appendix E:	Cost Estimates	_____
Appendix F:	Form of Guarantee for Advance Payments	_____

2. The mutual rights and obligations of the Authority and the Independent Engineering Agency shall be as set forth in the Contract; in particular:

(a) The Independent Engineering Agency shall carry out the Services in accordance with the provisions of the Contract; and

(b) The Authority shall make payments to the Independent Engineering Agency in accordance with the provisions of the Contract.

IN WITNESS WHEREOF, the Parties hereto have caused this Contract to be signed in their respective names as of the day and year first above written.

FOR AND ON BEHALF OF [NAME OF THE AUTHORITY]

By
(Authorized Representative)

FOR AND ON BEHALF OF [NAME OF THE INDEPENDENT ENGINEERING AGENCY]

By
(Authorized Representative)

[Note: If the Independent Engineering Agency consists of more than one entity, all of these entities should appear as signatories, e.g., in the following manner:]

FOR AND ON BEHALF OF EACH OF
THE MEMBERS OF THE INDEPENDENT ENGINEERING AGENCY

[Name of the Member]

By
(Authorized Representative)

[Name of the Member]

By
(Authorized Representative)

II. GENERAL CONDITIONS OF CONTRACT

1. GENERAL PROVISIONS

1.1 Definitions

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

(a) "Applicable Law" means the laws and any other instruments having the force of law in India, as they may be issued and in force from time to time;

(b) "Contract" means the Contract signed by the Parties, to which these General Conditions of Contract (GC) are attached, together with all the documents listed in Clause 1 of such signed Contract;

(c) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause GC 2.1;

(d) "Contract Price" means the price to be paid for the performance of the Services, in accordance with Clause 6;

(e) "GC" means these General Conditions of Contract;

(f) "Government" means the Government of Karnataka;

(g) "Local currency" means Indian Rupees;

~~(h) "Member", in case the Independent Engineering Agency consist of a joint venture of more than one entity, means any of these entities, and "Members" means all of these entities; 'Member in Charge' means the entity specified in the SC to act on their behalf in exercising all the Independent Engineering Agency' rights and obligations towards the Authority under this Contract.~~

(i) "Party" means the Authority or the Independent Engineering Agency, as the case may be, and Parties means both of them;

(j) "Personnel" means persons hired by the Independent Engineering Agency or by any Sub-Independent Engineering Agency as employees and assigned to the performance of the Services or any part thereof; and 'key personnel' means the personnel referred to in Clause GC 4.2 (a);

(k) "SC" means the Special Conditions of Contract by which these General Conditions of Contract may be amended or supplemented;

(l) "Services" means the work to be performed by the Independent Engineering Agency pursuant to this Contract as described in Appendix A; and

(m) "Sub-Independent Engineering Agency" means any entity to which the Independent Engineering Agency subcontract any part of the Services in accordance with the provisions of Clauses 3.5 and 4.

(n) 'Third party" means any person or entity other than the Government, the Authority, the Independent Engineering Agency, or a Sub-Independent Engineering Agency.

1.2 Law Governing the Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the Applicable Law.

1.3 Language

This Contract has been executed in English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

1.4 Notices

Any notice, request or consent made pursuant to this Contract shall be in writing and shall be deemed to have been made when delivered in person to an authorized representative of the Party to whom the communication is addressed, or when sent by registered mail, telex, telegram or facsimile to such Party at the address specified in the SC.

1.5 Location

The Services shall be performed at such locations as are specified in Appendix A and, where the location of a particular task is not so specified, at such locations, whether in Karnataka or elsewhere, as the Authority may approve.

1.6 Authorized Representatives

Any action required or permitted to be taken, and any document required or permitted to be executed, under this Contract by the Authority or the Independent Engineering Agency may be taken or executed by the officials specified in the SC.

1.7 Taxes and Duties

The Independent Engineering Agency, Sub-Independent Engineering Agency and their Personnel shall pay such taxes, duties, fees and other impositions as may be levied under the Applicable Law, the amount of which is deemed to have been included in the Contract Price.

2. Commencement, Completion, Modification and termination of Contract

2.1 Effectiveness of Contract

This Contract shall come into effect on the date the Contract is signed by both Parties or such other later date as may be stated in the SC.

2.2 Commencement of Services

The Independent Engineering Agency shall begin carrying out the Services within thirty (30) days after the date the Contract becomes effective, or at such other date as may be specified in the SC.

2.3 Expiration of Contract

Unless terminated earlier pursuant to Clause 2.7, this Contract shall terminate at the end of such time period after the Effective Date as is specified in the SC.

2.4 Modification

Modification of the terms and conditions of this Contract, including any modification of the scope of the Services or of the Contract Price, may only be made by written agreement between the Parties.

2.5 Force Majeure

2.5.1 **Definition**

For the purposes of this Contract, "Force Majeure" means an event which is beyond the reasonable control of a Party, and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances.

2.5.2 **No Breach of Contract**

The failure of a Party to fulfil any of its obligations under the contract shall not be considered to be a breach of, or default under this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

2.5.3 **Extension of Time**

Any period within which a Party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such Party was unable to perform such action as a result of Force Majeure.

2.5.4 **Payments**

During the period of their inability to perform the Services as a result of an event of Force Majeure, the Independent Engineering Agency shall be entitled to continue to be paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

2.6 Suspension:

The Authority may by written notice of suspension to the Independent Agency, suspend all payments to the Independent Engineering Agency hereunder if the Independent Engineering Agency fail to perform any of their obligations under this contract, including the carrying out of the Services, provided that such notice of suspension (i) shall specify the nature of the failure, and (ii) shall request the Independent Engineering Agency to remedy such failure within a period not exceeding thirty (30) days after receipt by the Independent Engineering Agency of such notice of suspension.

2.7 Termination

2.7.1 By the Authority

The Authority may terminate this Contract, by not less than thirty (30) days written notice of termination to the Independent Engineering Agency, to be given after the occurrence of any of the events specified in paragraphs (a) through (d) of this Clause 2.7.1 and sixty (60) days in the case of the event referred to in (e):

(a) If the Independent Engineering Agency do not remedy a failure in the performance of their obligations under the Contract, within thirty (30) days of receipt after being notified or within such further period as the Authority may have subsequently approved in writing.

(b) If the Independent Engineering Agency (or any of their Members) become insolvent or bankrupt;

(c) If as the result of Force Majeure, the Independent Engineering Agency are unable to perform a material portion of the Services for a period of not less than sixty (60) days or

(d) If the Independent Agency, in the judgment of the Authority has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

For the purpose of this clause:

"Corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the selection process or in contract execution.

"fraudulent practice" means a misrepresentation of facts in order to influence a selection process or the execution of a contract to the detriment of GOK, and includes collusive practice among Independent Engineering Agency (prior to or after submission of proposals) designed to establish prices at artificial non-competitive levels and to deprive GOK of the benefits of free and open competition.

(e) If the Authority, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.

2.7.2 By the Independent Engineering Agency

The Independent Engineering Agency may terminate this Contract, by not less than thirty (30) days written notice to the Authority, such notice to be given after the occurrence of any of the events specified in paragraphs (a) through (c) of this Clause 2.7.2:

(a) If the Authority fails to pay any monies due to the Independent Engineering Agency pursuant to this Contract and not subject to dispute pursuant to Clause 7 hereof within forty-five (45) days after receiving written notice from the Independent Engineering Agency that such payment is overdue

(b) If the Authority is in material breach of its obligations pursuant to this Contract and has not remedied the same with in forty-five (45) days (or such longer period as the Independent Engineering Agency may have subsequently approved in writing) following the receipt by the Authority of the Independent Engineering Agency notice specifying such breach.

(c) If as the result of Force Majeure, the Independent Engineering Agency are unable to perform a material portion of the Services for a period of not less than sixty (60) days.

2.7.3 Cessation of Rights and Obligations

Upon termination of this Contract pursuant to Clause GC 2.7, or upon expiration of this Contract pursuant to Clause GC 2.3, all rights and obligations of the Parties hereunder shall cease, except :

(i) such rights and obligations as may have accrued on the date of termination or expiration

(ii) the obligation of confidentiality set forth in Clause GC 3.3 here of

(iii) the Independent Engineering Agency obligations to permit inspection, copying and auditing of
their accounts and records set forth in Clause GC 3.5 (ii) hereof and

(iv) Any right which a Party may have under the Applicable Law.

2.7.4 Cessation of Services

Upon termination of this Contract by notice of either Party to the other pursuant to Clauses GC 2.7.1 or GC 2.7.2 hereof, the Independent Engineering Agency shall, immediately upon dispatch or receipt of such notice, take all necessary steps to bring the Services to a close in a prompt and orderly manner and shall make every reasonable effort to keep expenditures for this purpose to a minimum. With respect to documents prepared by the Independent Engineering Agency and equipment and materials furnished by the Authority, the Independent Engineering Agency shall proceed as provided, respectively, by Clauses GC 3.8 and GC 3.9.

2.7.5 Payment upon Termination

Upon termination of this Contract pursuant to Clauses GC 2.7.1 or GC 2.7.2 here of, the Authority shall make the following payments to the Independent Engineering Agency (after offsetting against these payments any amount that may be due from the Independent Engineering Agency to the Authority):

(a) remuneration pursuant to Clause GC 6 hereof for Services satisfactorily performed prior to the effective date of termination;

(b) reimbursable expenditures pursuant to Clause GC 6 hereof for expenditures actually incurred prior to the effective date of termination; and

(c) Except in the case of termination pursuant to paragraphs (a) through (b) of Clause GC 2.7.1 hereof, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract.

2.7.6 Disputes about Events of Termination

If either Party disputes whether an event specified in paragraphs (a) through (e) of Clause GC 2.7.1 or in Clause GC 2.7.2 hereof has occurred, such Party may, within forty-five (45) days after receipt of notice of termination from the other Party, refer the matter to arbitration pursuant to Clause GC 7 hereof, and this Contract shall not be terminated on account of such event except in accordance with the terms of any resulting arbitral award.

3.0 Obligations of the Independent Engineering Agency

3.1 General

The Independent Engineering Agency shall perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional techniques and practices, and shall observe sound management practices, and employ appropriate advanced technology and safe and effective equipment, machinery, materials and methods. The Independent Engineering Agency shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the Authority, and shall at all times support and safeguard the Authority's legitimate interests in any dealings with Sub-Independent Engineering Agency or Third Parties.

3.2 Conflict of Interests

3.2.1 Independent Engineering Agency Not to Benefit from Commissions, Discounts, etc.

The remuneration of the Independent Engineering Agency pursuant to Clause GC 6 hereof shall constitute the Independent Agency' sole remuneration in connection with this Contract or the Services and the Independent Engineering Agency shall not accept for their own benefit any trade commission, discount or similar payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations hereunder, and the Independent Engineering Agency shall use their best efforts to ensure that any Sub-Independent Agency, as well as the Personnel and agents of either of them, similarly shall not receive any such additional remuneration.

3.2.2 Procurement Rules of Funding Agencies

If the Independent Agency, as part of the Services, have the responsibility of advising the Authority on the procurement of goods, works or services, the Independent Engineering Agency shall comply with any applicable procurement guidelines of the funding agencies and shall at all times exercise such responsibility in the best interest of the Authority. Any discounts or commissions obtained by the Independent Engineering Agency in the exercise of such procurement responsibility shall be for the account of the Authority.

3.2.3 Independent Engineering Agency and Affiliates Not to engage in Certain Activities

The Independent Engineering Agency agree that, during the term of this Contract and after its termination, the Independent Engineering Agency and any entity affiliated with the Independent Agency, as well as any Sub-Independent Engineering Agency and any entity affiliated with such Sub-Independent Agency, shall be disqualified from providing goods, works or services (other than the Services and any continuation thereof) for any project resulting from or closely related to the Services.

3.2.4 Prohibition of Conflicting Activities

The Independent Engineering Agency shall not engage, and shall cause their Personnel as well as their Sub-Independent Engineering Agency and their Personnel not to engage, either directly or indirectly, in any of the following activities:

(a) during the term of this Contract, any business or professional activities in GOK which would conflict with the activities assigned to them under this Contract; and

(b) After the termination of this Contract, such other activities as may be specified in the SC.

3.3 Confidentiality

The Independent Engineering Agency, their Sub-Independent Engineering Agency and the Personnel of either of them shall not, either during the term or within two (2) years after the expiration of this Contract, disclose any proprietary or confidential information relating to the Project, the Services, this Contract or the Authority's business or operations without

the prior written consent of the Authority.

3.4 Insurance to be Taken Out by the Independent Engineering Agency

The Independent Engineering Agency (i) shall take out and maintain, and shall cause any Sub-Independent Engineering Agency to take out and maintain, at their (or the Sub-Independent Engineering Agency, as the case may be) own cost but on terms and conditions approved by the Authority, insurance against the risks, and for the coverage's, as shall be specified in the SC, and (ii) at the Authority's request, shall provide evidence to the Authority showing that such insurance has been taken out and maintained and that the current premiums therefore have been paid.

3.5 Accounting, Inspection and Auditing

The Independent Engineering Agency (i) shall keep accurate and systematic accounts and records in respect of the Services, hereunder, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify all relevant time charges and cost, and the bases thereof (including such bases as may be specifically referred to in the SC); (ii) shall permit the Authority or its designated representative periodically, and up to one year from the expiration or termination of this Contract, to inspect the same and make copies thereof as well as to have them audited by auditors appointed by the Authority.

3.6 Independent Engineering Agency's Actions Requiring Authority's Prior Approval

The Independent Engineering Agency shall obtain the Authority's prior approval in writing before taking any of the following actions:

(a) entering into a subcontract for the performance of any part of the Services, it being understood (I) that the selection of the Sub-Independent Engineering Agency and the terms and conditions of the subcontract shall have been approved in writing by the Authority prior to the execution of the subcontract, and (ii) that the Independent Engineering Agency shall remain fully liable for the performance of the Services by the Sub-Independent Engineering Agency and its Personnel pursuant to this Contract;

(b) appointing such members of the Personnel as are listed in Appendix C ("Independent Engineering Agency' Sub-Independent Engineering Agency' Key Personnel") merely by title but not by name;

(c) Any other action that may be specified in the SC.

3.7 Reporting Obligations

The Independent Engineering Agency shall submit to the Authority the reports and documents specified in Appendix B hereto, in the form, in the numbers and within the time periods set forth in the said Appendix.

3.8 Documents Prepared by the Independent Engineering Agency to Be the Property of the Authority

All plans, drawings, specifications, designs, reports, other documents and software prepared by the Independent Engineering Agency for the Authority under this Contract shall become and remain the property of the Authority, and the Independent Engineering Agency shall, not later than upon termination or expiration of this Contract, deliver all such documents to the Authority, together with a detailed inventory thereof. The Independent Engineering Agency may retain a copy of such documents and software. Restrictions about the future use of these documents and software, if any, shall be specified in the SC.

3.9 Equipment and Materials Furnished by the Authority

Equipment and materials made available to the Independent Engineering Agency by the Authority, or purchased by the Independent Engineering Agency with funds provided by the Authority, shall be the property of the Authority and shall be marked accordingly. Upon termination or expiration of this Contract, the Independent Engineering Agency shall make available to the Authority an inventory of such equipment and materials and shall dispose of such equipment and materials in accordance with the Authority's instructions. While in possession of such equipment and materials, the Independent Engineering Agency, unless otherwise instructed by the Authority in writing, shall insure them at the expense of the Authority in an amount equal to their full replacement value.

2.0 Independent Agency' Personnel and Sub-Independent Engineering Agency

4.1 General

The Independent Engineering Agency shall employ and provide such qualified and experienced Personnel and Sub-Independent Engineering Agency as are required to carry out the Services.

4.2 Description of Personnel

(a) The titles, agreed job descriptions, minimum qualification and estimated periods of engagement in the carrying out of the Services of each of the Independent Agency' Key Personnel are described in Appendix C. If any of the Key Personnel has already been approved by the Authority's his/her name is listed as well.

(b) If required to comply with the provisions of Clause GCC 3.1.1 hereof, adjustments with respect to the estimated periods of engagement of Key Personnel set forth in Appendix C may be made by the Independent Engineering Agency by written notice to the Authority, provided (i) that such adjustments shall not alter the originally estimated period of engagement of any individual by more than 10% or one week, whichever is larger, and (ii) that the aggregate of such adjustments shall not cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1 (b) of this Contract. Any

other such adjustments shall only be made with the Authority's written approval.

(c) If additional work is required beyond the scope of the Services specified in Appendix A, the estimated periods of engagement of Key Personnel set forth in Appendix C may be increased by agreement in writing between the Authority and the Independent Agency, provided that any such increase shall not, except as otherwise agreed, cause payments under this Contract to exceed the ceilings set forth in Clause GC 6.1(b) of this Contract.

4.3 Approval of Personnel

The Key Personnel and Sub-Independent Engineering Agency listed by title as well as by name in Appendix C are hereby approved by the Authority. In respect of other Key Personnel which the Independent Engineering Agency propose to use in the carrying out of the Services, the Independent Engineering Agency shall submit to the Authority for review and approval a copy of their biographical data. If the Authority does not object in writing (stating the reasons for the objection) within twenty-one (21) calendar days from the date of receipt of such biographical data, such Key Personnel shall be deemed to have been approved by the Authority.

4.4 Working Hours, Overtime, Leave, etc.

(a) Working hours and holidays for Key Personnel are set forth in Appendix C.

(b) The Key Personnel shall not be entitled to be paid for overtime nor to take paid sick leave or vacation leave except as specified in Appendix C hereto, and except as specified in such Appendix, the Independent Agency' remuneration shall be deemed to cover these items. All leave to be allowed to the Personnel is included in the staff-months of service set forth in Appendix C. Any taking of leave by Personnel shall be subject to the prior approval by the Independent Engineering Agency who shall ensure that absence for leave purposes will not delay the progress and adequate supervision of the Services.

4.5 Removal and/or Replacement of Personnel

(a) Except as the Authority may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Independent Agency, it becomes necessary to replace any of the Personnel, the Independent Engineering Agency shall forthwith provide as a replacement a person of equivalent or better qualifications.

(b) If the Authority (i) finds that any of the Personnel has committed serious misconduct or has been charged with having committed a criminal action, or (ii) has reasonable cause to be dissatisfied with the performance of any of the Personnel, then the Independent Engineering Agency shall, at the Authority's written request specifying the grounds therefore, forthwith provide as a replacement a person with qualifications and experience acceptable to the Authority.

(c) Any of the Personnel provided as a replacement under Clauses (a) and (b) above, the rate of remuneration applicable to such person as well as any reimbursable expenditures the Independent Engineering Agency may wish to claim as a result of such replacement, shall be subject to the prior written approval by the Authority. Except as the Authority may otherwise agree, (i) the Independent Engineering Agency shall bear all additional travel and other costs arising out of or incidental to any removal and/or replacement, and (ii) the remuneration to be paid for any of the Personnel provided as a replacement shall not exceed the remuneration which would have been payable to the Personnel replaced.

3.0 Obligations of the Authority

5.1 Assistance and Exemptions

Unless otherwise specified in the SC, the Authority shall use its best efforts to ensure that the Government shall:

(a) issue to officials, agents and representatives of the Government all such instructions as may be necessary or appropriate for the prompt and effective implementation of the Services;

(b) assist the Independent Engineering Agency and the Personnel and any Sub-Independent Engineering Agency employed by the Independent Engineering Agency for the Services from any requirement to register or obtain any permit to practice their profession or to establish themselves either individually or as a corporate entity according to the Applicable Law;

(c) Provide to the Independent Agency, Sub-Independent Engineering Agency and Personnel any such other assistance as may be specified in the SC.

5.2 Access to Land

The Authority warrants that the Independent Engineering Agency shall have, free of charge, unimpeded access to all land in the Government's country in respect of which access is required for the performance of the Services. The Authority will be responsible for any damage to such land or any property thereon resulting from such access and will indemnify the Independent Engineering Agency and each of the Personnel in respect of liability for any such damage, unless such damage is caused by the default or negligence of the Independent Engineering Agency or any Sub-Independent Engineering Agency or the Personnel of either of them.

5.3 Services, Facilities and Property of the Authority

The Authority shall make available to the Independent Engineering Agency and the Personnel, for the purposes of the services and free of any charge, the services, facilities

and property described in Appendix D at the times and in the manner specified in said Appendix D, provided that if such services, facilities and property shall not be made available to the Independent Engineering Agency as and when so specified, the Parties shall agree on (i) any time extension that it may be appropriate to grant to the Independent Engineering Agency for the performance of the Services, (ii) the manner in which the Independent Engineering Agency shall procure any such services, facilities and property from other sources, and (iii) the additional payments, if any, to be made to the Independent Engineering Agency as a result thereof pursuant to Clause GC 6.1(c) hereinafter.

5.4 Payment

In consideration of the Services performed by the Independent Engineering Agency under this Contract, the Authority shall make to the Independent Engineering Agency such payments and in such manner as is provided by Clause GC 6 of this Contract.

4.0 Payments to the Independent Engineering Agency

6.1 Cost Estimates; Ceiling Amount

(a) An estimate of the cost of the Services payable in local is set forth in Appendix E.

(b) Except as may be otherwise agreed under Clause GC 2.6 and subject to Clause GC 6.1(c), payments under this Contract shall not exceed the ceilings specified in the SC. The Independent Engineering Agency shall notify the Authority as soon as cumulative charges incurred for the Services have reached 80% of either of these ceilings.

(c) Notwithstanding Clause GC 6.1(b) hereof, if pursuant to clauses GC 5.3, 5.4 hereof, the Parties shall agree that additional payments, shall be made to the Independent Engineering Agency in order to cover any necessary additional expenditures not envisaged in the cost estimates referred to in Clause GC 6.1(a) above, the ceiling or ceilings, as the case may be, set forth in Clause GC 6.1(b) above shall be increased by the amount or amounts, as the case may be, of any such additional payments.

6.2 Remuneration and Reimbursable Expenditures

(a) Subject to the ceilings specified in Clause GC 6.1(b) hereof, the Authority shall pay to the Independent Engineering Agency (i) remuneration as set forth in Clause GC 6.2(b), and (ii) reimbursable expenditures as set forth in Clause GC 6.2(c). If specified in the SC, said remuneration shall be subject to price adjustment as specified in the SC.

(b) Remuneration for the Personnel shall be determined on the basis of time actually spent by such Personnel in the performance of the Services after the date determined in accordance with Clause GC 2.3 and Clause SC 2.3 (or such other date as the Parties shall agree in writing) at the rates referred to, and subject to such additional provisions as

are set forth, in the SC.

(c) Reimbursable expenditures actually and reasonably incurred by the Independent Engineering Agency in the performance of the Services, as specified in Clause SC 6.2 (c).

6.3 Currency of Payment

All payments (Remuneration and Reimbursable) shall be made in Indian Rupees

6.4 Mode of Billing and Payment

Billing and payments in respect of the Services shall be made as follows:

(a) The Authority shall cause to be paid to the Independent Engineering Agency an ~~advance payment~~ as specified in the SC, and as otherwise set forth below. The advance payment will be due after provision by the Independent Engineering Agency to the Authority of a bank guarantee by a bank acceptable to the Authority in an amount specified in the SC, such bank guarantee (i) to remain effective until the advance payment has been fully set off as provided in the SC, and (ii) to be in the form set forth in Appendix F hereto or in such other form as the Authority shall have approved in writing.

(b) As soon as practicable and not later than fifteen (15 days) after the end of each calendar month during the period of the Services, the Independent Engineering Agency shall submit to the Authority, in duplicate, itemized statements, accompanied by copies of receipted invoices, vouchers and other appropriate supporting materials (wherever the reimbursable expenditure is as per actual), of the amounts payable pursuant to Clauses GC 6.3 and 6.4 for such month. Each monthly statement shall distinguish that portion of the total eligible costs which pertains to remuneration from that portion which pertains to reimbursable expenditures.

(c) The Authority shall cause the payment of the Independent Engineering Agency within sixty (60) days after the receipt by the Authority of bills with supporting documents (if required). Only such portion of a monthly statement that is not satisfactorily supported may be withheld from payment. Should any discrepancy be found to exist between actual payment and costs authorized to be incurred by the Independent Agency, the Authority may add or subtract the difference from any subsequent payments. Interest at the rate specified in the SC shall become payable as from the above

(d) Due date on any amount due by, but not paid on, such due date.

(e) The final payment under this Clause shall be made only after the final report and a final statement, identified as such, shall have been submitted by the Independent Engineering Agency and approved as satisfactory by the Authority. The Services shall be deemed completed and finally accepted by the Authority and the final report and final statement shall be deemed approved by the Authority as satisfactory ninety (90) calendar days after receipt of the final report and final statement by the Authority unless the Authority, within such ninety (90)-day period, gives written notice to the Independent Engineering Agency specifying in detail deficiencies in the

Services, the final report or final statement. The Independent Engineering Agency shall there upon promptly make any necessary corrections, and upon completion of such corrections, the foregoing process shall be repeated. Any amount which the Authority has paid or caused to be paid in accordance with this Clause in excess of the amounts actually payable in accordance with the provisions of this Contract shall be reimbursed by the Independent Engineering Agency to the Authority within thirty (30) days after receipt by the Independent Engineering Agency of notice thereof. Any such claim by the Authority for reimbursement must be made within twelve (12) calendar months after receipt by the Authority of a final report and a final statement approved by the Authority in accordance with the above.

(f) All payments under this Contract shall be made to the account of the Independent Engineering Agency specified in the SC.

7.0 Settlement of Disputes

7.1 LEVEL - 1

The rationale of amicable settlement should be followed to settle the disputes at the lowest possible level of responsibility by bringing the individuals concerned face to face, Project Manager/Authorized Signatory of the Consultancy firm and Engineer-in-Chief can raise dispute The tender accepting authority and the Project Manager of the Consultancy firm's representatives in the Project may try to settle the dispute amicably.

If the dispute is not settled at the above said level within 15 days, then the matter shall be tried to be solved by authorized representatives of the consultancy firm and the Special Commissioner (Project).

If the dispute is not settled as indicated above within 15 days and same can be extended for 15 days with the consent of both the parties but should not exceed 30 days as and when the dispute arises within the contract period.

7.2 LEVEL - 2

If the consultancy firm is not satisfied with the decision or order passed in the Meeting with Special Commissioner (Project), the matter shall be referred to the Chief Commissioner, BBMP within 14 days from the decision taken by Special Commissioner (Project) and same can be extended for 15days with the consent of both the parties. The Commissioner, BBMP shall try to settle the issue amicably within 30 days from the date receipt of notification of a dispute referred by the Consultancy firm.

7.3 LEVEL - 3

Only after Exhausting of the above Level-1and Level-2 Amicable settlement, then only the parties have got liberty to settle the dispute in civil court of respective district jurisdiction.

III. SPECIAL CONDITIONS OF CONTRACT

Number of
GC Clause

A. Amendments of, and Supplements to, Clauses in the General Conditions of Contract

[1.1 (h) The Member in Charge is ……..]

[1.4.1 The addresses are:

Authority:

Attention : ……..
Cable address : _____
Telex : _____
Facsimile : _____
E-mail : ……..

Independent Engineering Agency:

Attention :----------
Cable address : _____
Telex : _____
Facsimile : _____
E-mail : ……..

[Note[1]: Fill in the Blanks]

[1.4.2 Notice will be deemed to be effective as follows:

(a) in the case of personal delivery or registered mail, on delivery;
(b) in the case of telexes, 24 hours following confirmed transmission;
(c) in the case of telegrams, 24 hours following confirmed transmission; and
(d) in the case of facsimiles, 24 hours following confirmed transmission.]

[1.6 The Authorized Representatives are:

For the Authority: _____
_____
For the Independent Agency: _____
_____

[Note: Fill in the Blanks]

[1.7.1 The Independent Agency, Sub-Independent Engineering Agency and the Personnel shall pay the taxes, duties, fees, levies and other impositions levied under the existing, amended or

enacted laws during life of this contract and the Authority shall perform such duties in regard to the deduction of such tax as may be lawfully imposed.]

[1] *All notes should be deleted in the final text*

[1.7.2 However, the Consultancy Services tax payable for providing this Consultancy Services shall be paid/ reimbursed by the Authority separately.]

[2.1 The effectiveness of contract shall be on the date……..]

[2.2 The time period shall be …….days *[Note: Fill in 30 days or any other appropriate]* or such other time period as the Parties may agree in writing.]

[2.3 The time period shall be _____ *[Note: Fill in the time period, e.g., 24 months]* or such other time period as the parties may agree in writing.]

[3.4 The risks and the coverage's shall be as follows:

(a) Third Party motor vehicle liability insurance as required under Motor Vehicles Act, 1988 in respect of motor vehicles operated in India by the Independent Engineering Agency or their Personnel or any Sub-Independent Engineering Agency or their Personnel for the period of consultancy.

(b) Third Party liability insurance with a minimum coverage, of Rs. ..... for the period of consultancy.

(c) Professional liability insurance, with a minimum coverage equal to estimated remuneration and reimbursable.

(d) Authority's liability and workers' compensation insurance in respect of the Personnel of the Independent Engineering Agency and of any Sub-Independent Agency, in accordance with the relevant provisions of the Applicable Law, as well as, with respect to such Personnel, any such life, health, accident, travel or other insurance as may be appropriate; and

(e) Insurance against loss of or damage to (i) equipment purchased in whole or in part with funds provided under this Contract, (ii) the Independent Agency' property used in the performance of the Services, and (iii) any documents prepared by the Independent Engineering Agency in the performance of the Services.]

[Note: Fill in the blanks and delete what is not applicable.]

[3.6(c) the other actions are:

Note: If there are no other actions, delete this Clause SC 3.7 from the SC. If the Services consist of civil works, the following should be added here:

"(i) taking any action under a civil works contract designating the Independent Engineering Agency as "Engineer", for which action, pursuant to such civil works contract, the written

approval of the Authority as "Employer" is required".]

[3.8 The Independent Engineering Agency shall not use these documents for purposes unrelated to this Contract without the prior written approval of the Authority.]

[4.6 *Note: If there is a resident system analyst, state here:* "The person designated as resident system analyst in Appendix C shall serve in that capacity, as specified in Clause GC 4.6." *If there is no such manager, delete this Clause SC 4.6 from the SC.*]

[5.1 *Note: List here any changes or additions to Clause GC 5.1. If there are no such changes or additions, delete this Clause SC 5.1 from the SC.*]

[6.1(b) The ceiling amount of contract is: Rs._____]

[6.2(a) *Note*: In order to adjust the remuneration for inflation, a price escalation provision should be included here if the contract has a duration of more than 18 months or if the inflation is expected to exceed 5% per annum. The escalation should be made every 12 months after the date of the contract for remuneration. A sample provision is provided below for guidance:

"Payments for remuneration made in accordance with Clause GC 6.2(a) shall be adjusted as follows:

Remuneration paid pursuant to the rates set forth in Appendix E shall be increased every twelve (12) months (and, for the first time, with effect for the remuneration earned in the 13th calendar month after the date of the Contract) by applying a factor of 6% [1] per annum.

[6.2(b) (1) It is understood (i) that the remuneration rates shall cover such salaries and allowances as the Independent Engineering Agency shall have agreed to pay to the Personnel as well as factors for social charges, overhead, and Independent Agency' fee, (ii) that bonuses or other means of profit-sharing shall not be allowed as an element of overhead, and (iii) that any rates specified for persons not yet appointed shall be provisional and shall be subject to revision, with the written approval of the Authority, once the applicable salaries and allowances are known.

(2) Remuneration for periods of less than one month shall be calculated on a calendar-day basis for time spent and attributable to the assignment (one day being equivalent to 1/30th of a month).

(3) The rates for Personnel are set forth in Appendix E].

[1] Modify appropriately keeping in view the inflation rate and the general salary increases for the year.

[6.2(c) The reimbursable expenditures shall be the following:

(1) An allowance (to cover boarding and/or lodging) for each of the personnel who have to work outside their normal duty station, at the rates specified in Appendix E;

(2) The cost of the following locally procured items : local transportation, office accommodations, camp facilities, camp services, subcontracted services, soil testing, equipment rentals, supplies, utilities and communication charges, all if and to the extent required for the purpose of the Services, at rates specified in Appendix E;

(3) The cost of equipment, materials and supplies to be procured as specified in Appendix E;

(4) The cost of any subcontract required for the Services and approved in writing by the Authority;

(5) Any such additional payments for properly procured items as the Parties may have agreed upon pursuant to the provisions of Clause GC 6.1(c); and

(6) The cost of such further items as may be required by the Independent Engineering Agency for the purpose of the Services, as agreed in writing by the Authority.

[*Note: Items that are not applicable should be deleted; others may be added.*]

[1] Modify appropriately.

[6.4 (a) The following provisions shall apply to the advance payment and the advance Payment guarantee:

(1) The Performance Security for an amount of 5% of the consultants quoted rate, shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and the form provided in Appendix F and by a scheduled commercial bank or surety acceptable to the Employer, and denominated in Indian Rupees. The Performance Security shall be valid until ***30 days from the Intended date of Completion of the project Period.***

(2) The Operator shall keep the Performance Bank Guarantee valid and enforceable throughout the Term and for a period of 30 days after the Term. In case the Performance Bank Guarantee provided by the Operator to the Employer is set to expire for any reason whatsoever at any time before expiry of 30 days after the Term, the Operator shall renew and provide to the Employer renewed Performance Bank Guarantee at least 30 days prior to its date of expiry. Upon any failure on part of the Operator to renew the Performance Bank Guarantee or to keep it valid and enforceable in terms of this Clause, the Performance Bank Guarantee will be en-cashed by the Employer without giving any notice to the Operator or to any other Party. This is without prejudice to any other action that may be taken by the Employer under the terms and conditions of this Contract.

(3) The Employer, without prejudice to any of its rights or remedies under this Contract, is free to en-cash the Performance Bank Guarantee in part or in full, in terms. In the event of the invocation of any amount of the Performance Bank Guarantee by the Employer under this Contract, the Operator shall immediately take appropriate steps to establish the Performance Bank Guarantee at its full value contemplated under this Contract within 15 days of the date when the Performance Bank Guarantee is wholly or partially invoked by the Employer.

(4) The bank guarantee shall be for an amount of Rs…….

[6.4(c) The interest rate is Rs.5%[1] per annum](G.C.C)

[6.4(e) the account is: ----------] *[Note: Fill in the blanks]*

IV. APPENDICES

Appendix A: Description of the Services

Refer TOR

Appendix B: Reporting Requirements

The following outputs are expected to be delivered in stages in total duration of assignment

"Appointment of Independent Engineering Agency for Implementation of Energy Efficiency Project for streetlights by replacement of existing conventional lamps with LED lamps along with Centralized Control & Monitoring System (CCMS) in Dasarahalli and Rajarajeshwari Nagar Zones of BBMP in Bengaluru, Karnataka.

4.1 Implementation phase (8 months):

No.	Deliverable	Elapsed Timeframe (T1 is The date of awarding LOA for the concessionaire)
1.	Approving Equipment Installation and manpower deployment plan Prepared by LCO with Authority / ICE.	T1+ 4 weeks
3.	Successful Project completion report in accordance to G.O, ToR and RFP (PPP concessionaire), handing over all the data to Authority and exit from the project.	T1+34 weeks
4.	Equipment commissioning certificate	T1+36 weeks

5.0 Apart from above said deliverables, Independent Engineering Agency shall submit monthly report of Equipment Installation/ dismantled report before 25th of every month.

*Expected time as per G.O.

4.2 Operation and Maintenance Phase (84 months):

During Operation and Maintenance Phase, the deliverables as per ToR are periodic in nature as stated below:

No.	Deliverable	Periodicity
1.	Energy audit reports	Monthly
2.	Reports on Tests	Monthly
3.	Reports on notices issued	Monthly
4.	Site Visit reports	Monthly
5.	Reports on analysis of CCMS data	Monthly(before 12th day of the month)
6.	Certified Energy Bills	Monthly(before 12th day of the month)
7.	Certified Concessionaire bills	Monthly(before 15th day of the month)
8.	Key Performance Indicators report	Monthly (before 15th day

		of the month)
9.	Complaints addressed report	Monthly
10	Equipment performance report	Monthly

Appendix C: Key Personnel and Sub-Independent Engineering Agency

Refer TOR

[List under: C-1 Titles [and names, if already available], detailed job descriptions and minimum qualifications. experience of Key Personnel to be assigned to work, and staff-months for each.

C-2 List of approved Sub-Independent Engineering Agency [if already available]; same Information with respect to their Personnel as in C-1 through C-2)]

Appendix D: Services and facilities to be provided by the Authority

Refer TOR
[List here under:

F-1 Services, facilities and property to be made available to the Independent Engineering Agency by the Authority.]

Appendix E: Cost Estimates in Indian Rupees

1. Although, the Consultants have quoted for the entire project in lump-sum ,the detailed breakdown of cost shall be provided in Section 4C and man power deployment shall be provided in Section 3G. The same will be scrutinized and shall be finalized prior to signing of Agreement and the same will be the basis for levying penalties and variations, if any, during the execution of the contract.

2. Further, the payments to the ICE will be made on EMI basis as per quoted consultancy fee. However, if the ICE must comply the deliverables as per Appendix B within the stipulated timeframe else penalised as set forth in Appendix E.

3. No price escalation is envisaged for the entire contract duration of years. In the event the consultancy services is extended beyond the project period due to the reasons by Authority, then price escalation as per CPI/WPI, whichever is applicable, will be made applicable as approved by the Authority. The CPI/WPI, whichever is applicable, base rate will be taken from the end of the project period.

4. ICE should submit all monthly reports set forth in Appendix B and ToR before 15th day of respective month, certified energy bills before **12th day of respective month** and certified Concessionaire EMI bills before **15th day of respective month.**

5. The recommended EMI and Energy bills shall not have variations in comparison with actuals. The ICE will be subjected to penal action if variations are found and also for delay in submitting the Deliverables as stated in Appendix B and ToR, The Authority will be responsible for monitoring the ICE performance and initiate action /penalize for non-compliance with the ToR, wrong/incomplete/delay in submissions Reports/Bills, poor progress monitoring, not informing in advance about necessary actions to be taken by the implementing agency, etc.

6. The Electrical Engineer/Engineer-in-charge of BBMP has to scrutinize the Energy bill/ Concessionaire EMI bill submitted by the ICEA at first level.

If any variation is found in the recommended Energy bill/ Concessionaire EMI bill on account of faulty bills, in comparison with CCMS details available the following penalty shall be levied:

Variation Amount	LD leviable
+/- (>0&<10)% in Energy bill/ Concessionaire EMI bill	2.5 % of the consultancy fee for the said project.
+/- (10 - 15) % in Energy bill/ Concessionaire EMI bill	5 % of the consultancy fee for the said project.
+/- (15 - 20)% in Energy bill/ Concessionaire EMI bill	7.5 % of the consultancy fee for the said project.
+/- (> 20)% in Energy bill/ Concessionaire EMI bill	10 % of the consultancy fee for the said project.

Note: 1. while calculating the variation the same will be rounded off to two decimal places.

7. The Authority will be responsible for monitoring ICE performance and initiate actions for non-compliance with the Terms of Reference. Based on the periodic review of the performance of PMC, necessary action will be initiated. In the event of total default / failure of the firm in execution of the services, the employer reserves the right to get the work executed by any other consultancy firm at the risk and cost of the defaulting consultancy firm. Decision of employer is final & binding on the consultancy firm.

Penalty for delays in submission of deliverables (Pre-Implementation Phase, implementation phase and O&M Phase):

If the consultants fails to submit the Deliverable as mentioned in Appendix B (4.1 and 4.2), clause within the defined timelines, the Employer shall, without prejudice to its other remedies under the Contract, deduct from the Consultancy fee, as penalty a sum equivalent to 0.1 % of the total consultancy fee, payable for each day of delay until actual submission or, up to a maximum deduction of 10% of the total consultancy fee payable.

Once sum of penalties as mentioned, above and in Appendix E (6) clause, reaches the maximum of 10% of the total consultancy fee payable, the Employer may consider termination of the Contract pursuant to GCC Clause 2.7. No penalty will be levied for delays, not attributable to the consultants.

Penalty for delay in deployment/replacement/ non-deployment of Key Professionals:

Whenever a change in Key Professional is proposed, approval of the CV for replacement personnel has to be obtained from the Employer. Further, for every replacement proposed for a particular position, 5% of the applicable man month rate/fee detailed in Schedule 4C, Breakdown of cost, payable for the entire project for that position, will be deducted, as a onetime lump sum deduction in ongoing bills.

In the event the sum of such of penalties totals to 10% of the total key professional remuneration for the entire project duration as detailed in Schedule 4C, Breakdown of Cost, the Employer may consider termination of the Contract pursuant to GCC Clause 2.7. No penalty will be levied for delays, not attributable to the consultants.

In the event the consultancy firm does not deploy the key professional/Development Professional, as specified in the Schedule 4C & Deployment Plan, for a period not more than 7 days, a penalty of twice the man day rate will be levied for the number of days of non-deployment. The same will be deducted in the ongoing bills.

Appendix F: Form of Bank Guarantee

To: …….. [name of client]

…… [address of client]

WHEREAS …….. [name and address of Consultant] (hereinafter called "the Consultant ") has undertaken, in pursuance of Contract No. …….. dated : ……. to execute ……..[name of Contract and brief description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Consultant shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Consultant such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Consultant, up to a total of Rs. …….. [amount of guarantee] 1_Rupees……[in words], and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of …… [amount of guarantee]2 as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Consultant before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Services to be performed there under or of any of the Contract documents which may be made between you and the Consultant shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition or modification.

This guarantee shall be valid until 30 days from intended date of Completion of the Service..

[1] An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract

[2] An amount shall be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract